# SPP End-Of-Summer Survey Highlights

Presented to:

Customer Response to Dynamic Prices and Demand Response Programs in California Workshop

June 8, 2004


**Momentum**
**Market Intelligence**

# Background and Objectives of Study

- **The Statewide Pricing Pilot (SPP) was designed to capture information to determine if time-differentiated pricing options should be offered to residential and C&I electricity customers in California**
- **The survey provided insights on customer preferences for time-differentiated pricing programs and options**
- **The End-of-Summer survey was conducted to understand pilot program participants' response to and perceptions of the pilot after their first summer on the program**
  - The survey included the opinions and behavior of SPP participants only
  - Those who elected not to participate in the pilot were not included in this research and may respond differently to the time-differentiated pricing models
- **The survey captured only self-reported information about changes in energy use since starting the pilot program**
  - Actual measures of changes in energy use may be different

# Project Methodology

- **A total of 398 residential and 92 C&I SPP participants completed the End-of-Summer survey**
  - Response rates: 37% of residential and 35% of C&I SPP participants
- **Data was collected in December 2003 using telephone interviews that lasted 15 to 20 minutes**
- **Respondents said they were aware of, and knowledgeable about, the participation of their household or business in the statewide pricing pilot**
- **A sampling plan was developed to allow exploration of survey responses by customer class (residential/C&I), pricing condition (TOU, CPP-F, CPP-V, Information-Only), and climate zone**
- **Results reflect the behaviors and opinions of SPP participants and may not be generalizable to the total population of residential and C&I electricity customers.**
  - A self-selection bias for program participation may exist
  - Examination of differences in perceptions of the new pricing programs and energy consumption patterns between program participant and non-participants are outside the scope of this project.

# Sample Composition: End-of-Summer Survey

| | | | |
|---|---|---|---|
| **Residential**: | | | |
| Track A, Res, TOU, Climate Zone 1 | 55 | 21 | 14.1% |
| Track A, Res, TOU, Climate Zone 2 | 51 | 18 | 15.6% |
| Track A, Res, TOU, Climate Zone 3 | 53 | 23 | 12.9% |
| Track A, Res, TOU, Climate Zone 4 | 51 | 23 | 12.7% |
| Track A, Res, CPP-F, Climate Zone 1 | 57 | 27 | 11.5% |
| Track A, Res, CPP-F, Climate Zone 2 | 197 | 62 | 8.6% |
| Track A, Res, CPP-F, Climate Zone 3 | 200 | 62 | 8.6% |
| Track A, Res, CPP-F, Climate Zone 4 | 121 | 45 | 9.7% |
| Track A, Res, CPP-V, Climate Zone 2/3 | 37 | 14 | 17.4% |
| Track C, Res, CPP-V | 123 | 52 | 8.6% |
| Track A, Res, Info Only, Zone 2/3 | 133 | 51 | 9.0% |
| **C&I**: | | | |
| Track A, C&I, TOU | 100 | 35 | 11.2% |
| Track A, C&I, CPP-V | 35 | 15 | 16.1% |
| Track C, C&I, CPP-V | 127 | 42 | 10.3% |
| Total Residential | 1,078 | 398 | |
| Total C&I | 262 | 92 | |

# Section 1:
# Participant Reaction to the Pilot Program

# Participant Reaction - Key Takeaways

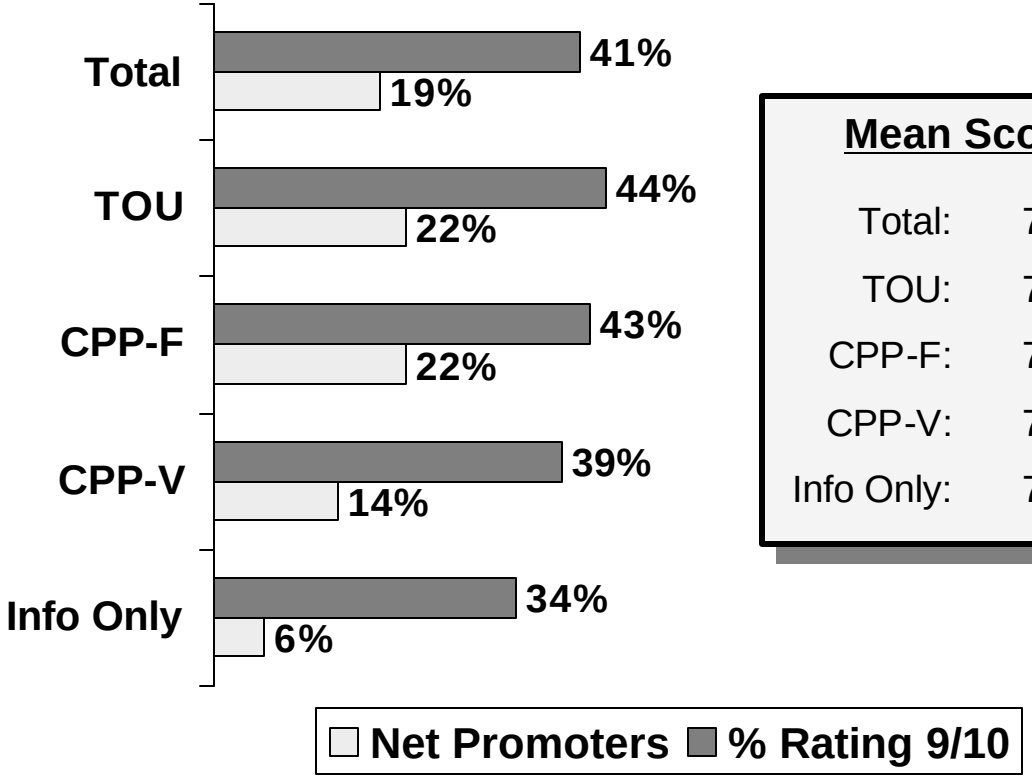
- **Program participants are generally** positive about their new rate options**, with relatively** small differences across most conditions
  - Overall program satisfaction levels are reasonably high, though lower for C&I participants, and residential Information-only participants
  - Participants tend to say that they prefer their new rate plan to their prior plan and they think the program should be extended to broader populations
  - Key reasons for positive evaluations include the obvious (saving money and/or saving energy), but also include the fact that participants like the ability to better manage their energy use
- **Most program participants** say they have changed the way they use energy under the program**, and particularly those facing Critical Peak periods**
  - But most participants report making **no more than one change**
  - And while participants living in hotter climate zones are more likely to report making any changes in energy use, the overall differences in reported behavior are not large
  - Specific reported changes in energy use do differ by condition and climate zone
  - Participants are more likely to turn off their air conditioner than turn up the thermostat.

# Participant Reaction - Key Takeaways (continued)

- **C&I participants** are less likely to report making changes **in the way they use energy under the program than are residential participants**
  - This is true for both “any changes” under the program in the way they use energy, and in terms of changes in energy use during Critical Peak periods
- **Both residential and C&I participants** found most of the changes in behavior **easy to implement** and nearly all say they could **make these changes permanent**
- Typically, participants **expected their electricity bills to decline** under the program, and many assumed they would **have to change the way they use electricity** to make this happen
  - Many participants **(45% residential; 37% C&I)** report that their **actual bills are lower** than comparable month bills on their old rate plan, and fewer than 15% report actual bills higher than what they “typically” pay
  - No more than 20% say their bills are higher than they expected them to be

# Residential participant satisfaction with the pilot program is high, if not stellar

## Overall Residential Customer Satisfaction with Program




**Mean Score**

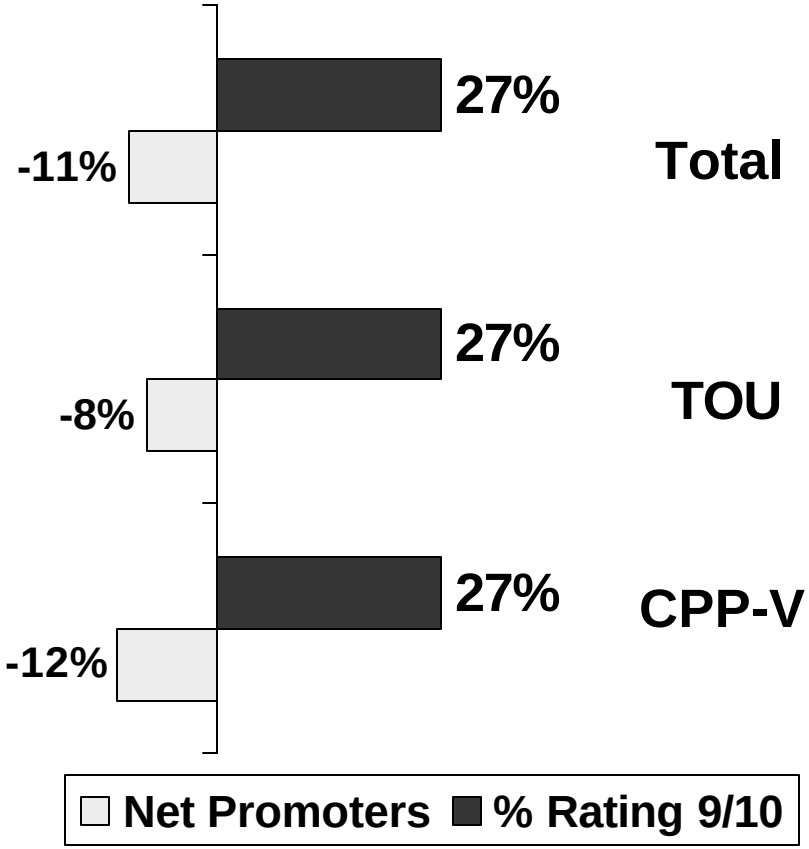
| | |
|---|---|
| Total: | 7.8 |
| TOU: | 7.8 |
| CPP-F: | 7.9 |
| CPP-V: | 7.7 |
| Info Only: | 7.5 |

**"Net Promoters"** is a key summary indicator of overall participant satisfaction and loyalty. Net promoters = % rating 9/10 (Promoters) minus % rating 1-6 (Detractors)

Q87: Overall, how satisfied are you with the new program? (1=Very Dissatisfied; 10= Very Satisfied)

# C&I participants are less satisfied, with more Detractors" than "Promoters" resulting in negative "Net Promoter" scores. Mean scores, however, are in the mid-range.

## Business Customer Satisfaction with Program




**Mean Score**

| | |
|---|---|
| Total: | 7.0 |
| TOU: | 7.0 |
| CPP-V: | 7.1 |

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Q87: Overall, how satisfied are you with the new program? (1=Very Dissatisfied; 10= Very Satisfied)
Net promoters = % rating 9/10 (Promoters) minus % rating 1-6 (Detractors)

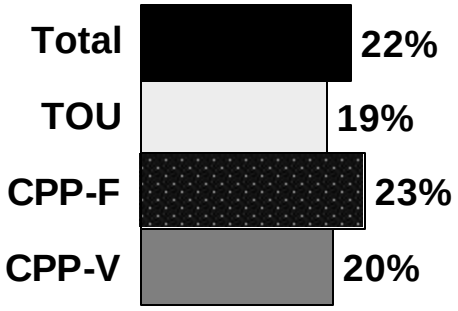
# Most residential participants on either TOU or CPP programs say that, given a choice, they would prefer to continue with the new pricing plan

## Residential Pricing Program Preference

**Continue New Plan**


| Why? | |
|---|---|
| I'm saving money | 58% |
| I like it | 12% |
| Saving energy | 10% |
| Can control/manage my energy use | 7% |

**Return to Previous Rate**



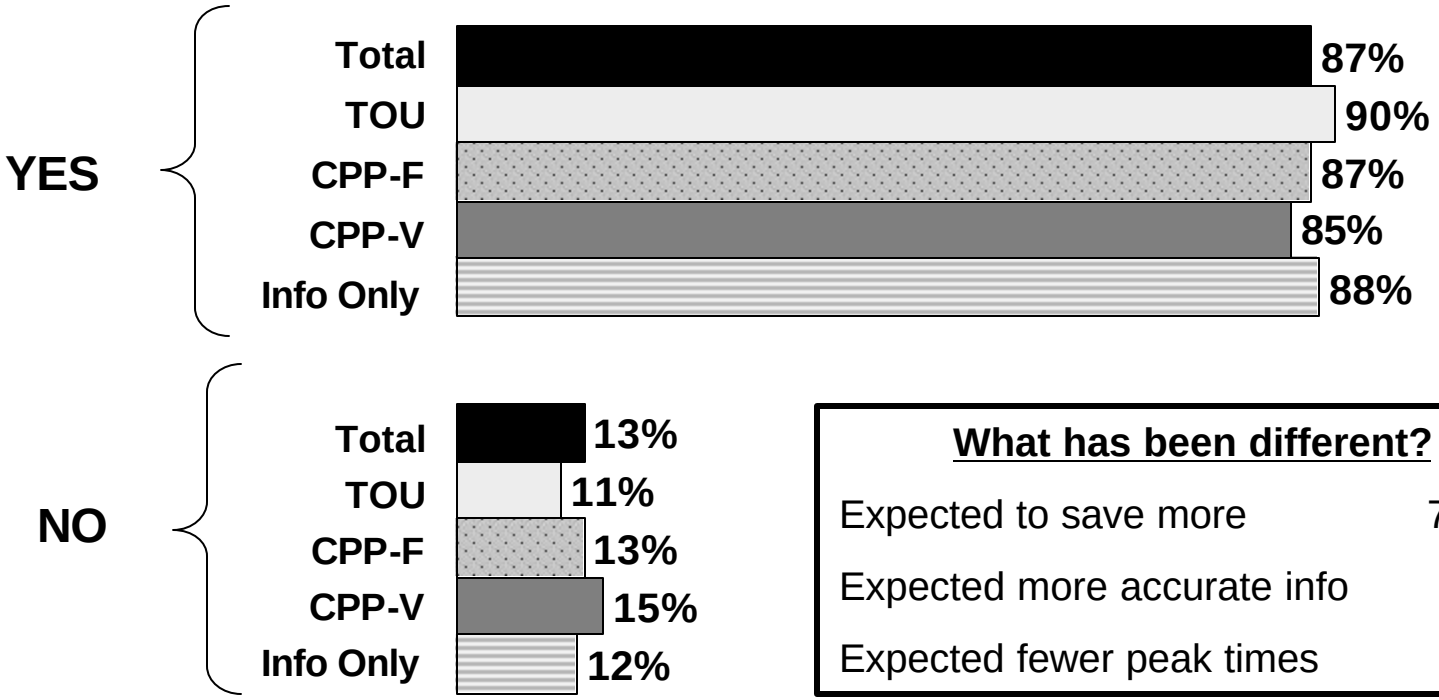

| Why Not? | |
|---|---|
| Need more time | 58% |
| Too much hassle | 22% |

Note: No statistically significant difference exists across programs (Chi square = 1.52, p=.465)

Q88: When the pilot program is over, would you rather continue on your new pricing plan or return to your previous rate program?/Q89: Why do you feel that way? (Question not asked of Information Only participants)

# These consistently positive responses are likely due to the fact that participants say the program worked as they expected

## Did The Pilot Program Work as Expected? (Residential)



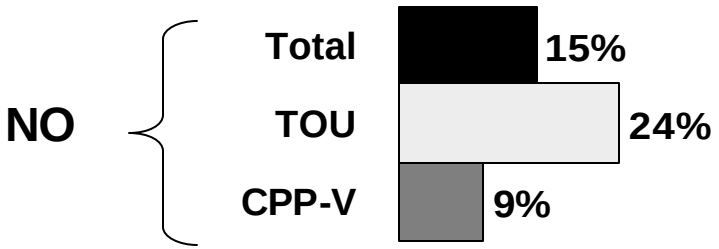

**What has been different?**

| | |
|---|---|
| Expected to save more | 70% |
| Expected more accurate info | 9% |
| Expected fewer peak times | 4% |

Q90: Has the pilot program worked as you expected?
Q91: What has been different than you expected?

# TOU-condition C&I participants are significantly less likely than CPP-V participants to say the program worked as they expected; for whatever reason, they expected to see more savings, especially TOU participants

## Did The Pilot Program Work as Expected? (Business)

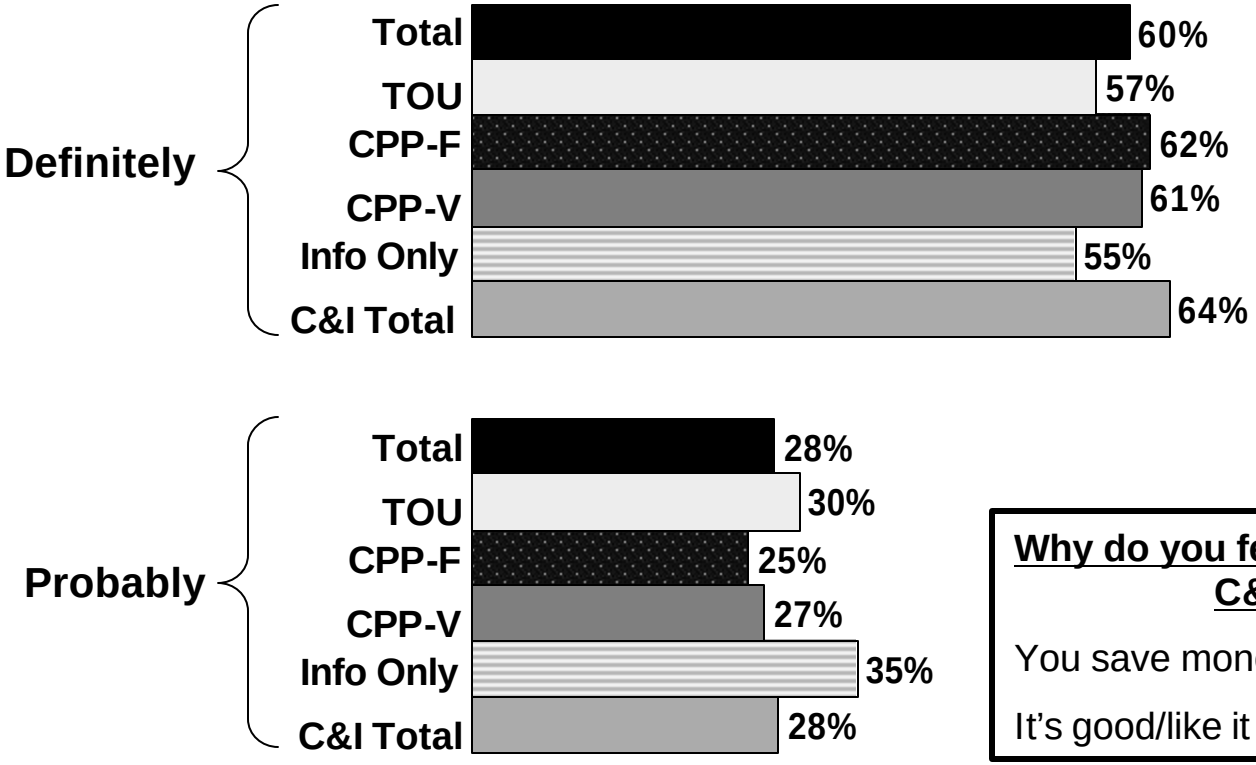

**What has been different?**

| | CPP-V | TOU |
|---|---|---|
| Expected to save more | 60% | 90% |
| Expected fewer peak times | 20% | 0% |

Q90: Has the pilot program worked as you expected?
Q91: What has been different than you expected?

# A majority of SPP program participants say the new program should be offered to other participants

## Should The New Program Be Offered?




**Why do you feel that way? Residential**

| | |
|---|---|
| You save energy | 19% |
| You save money | 17% |
| It's good/we like it | 15% |
| It makes people aware of energy conservation | 13% |
| Everyone should have a chance to participate | 12% |
| You can be in control/ manage your energy use | 5% |

**Why do you feel that way? C&(**

| | |
|---|---|
| You save money | 32% |
| It's good/like it | 19% |

Q95: In your opinion, should the new program be offered to other residential customers in California? Please tell me if the new program should definitely not be offered, probably should not be offered, probably should be offered, or definitely should be offered to other customers./ Q96: Why do you feel that way?

# Most residential participants report making at least one change in energy use during the program, with shifting laundry to off-peak times a common action

**ANY Reported Changes in Electricity Use During the Pilot By Residential Participants**

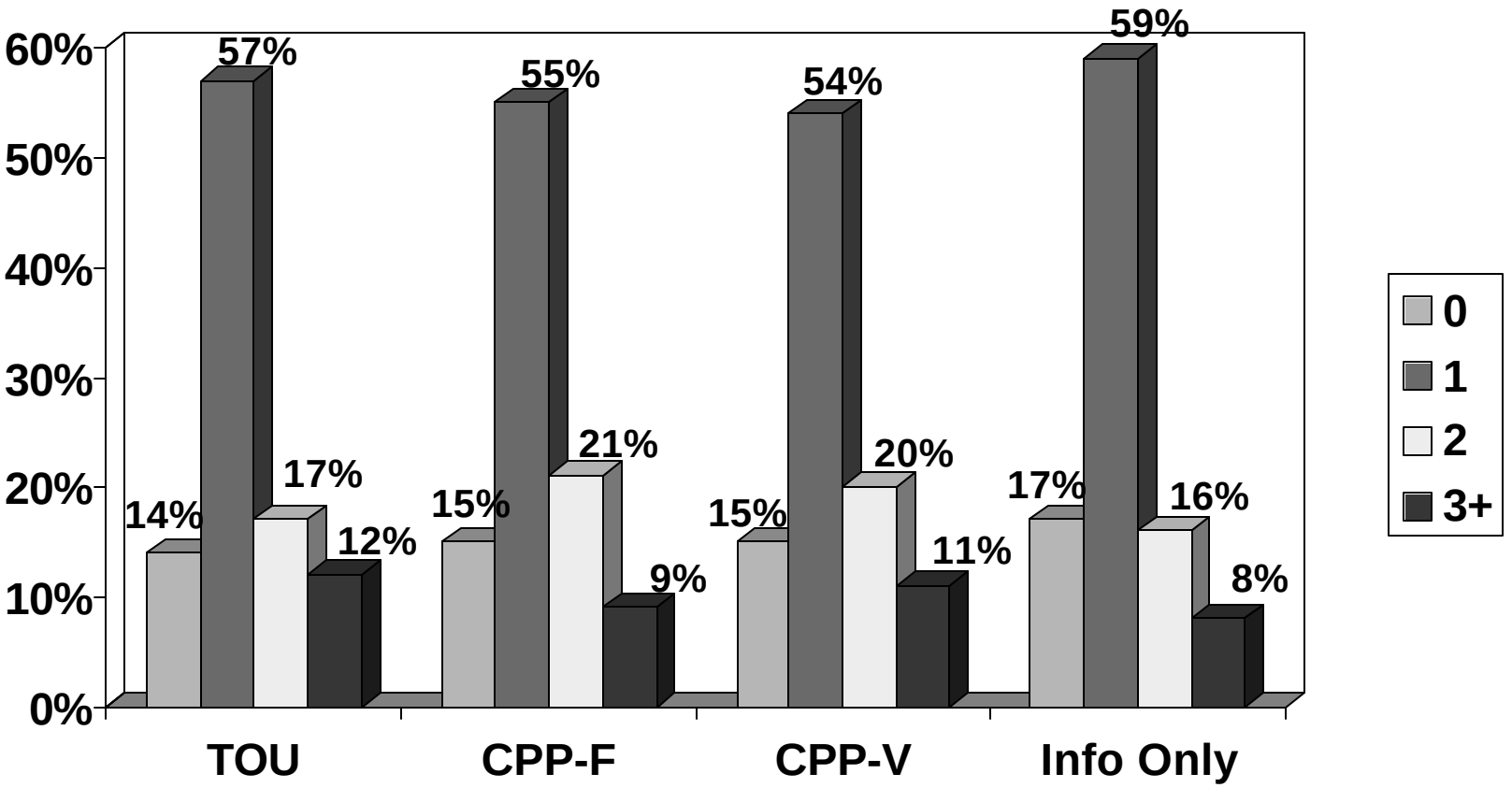
| | | | | |
|---|---|---|---|---|
| Any changes in use | **85%** | **85%** | **86%** | **83%** |
| Shift laundry* | **43%** | **31%** | **38%** | **17%** |
| Use appliances less * | **14%** | **23%** | **17%** | **14%** |
| Turn off lights * | **7%** | **18%** | **13%** | **29%** |
| Decrease peak use (general) * | **15%** | **21%** | **11%** | **3%** |
| Turn AC off/use less * | **12%** | **15%** | **14%** | **9%** |
| Shifted dishwasher use * | **5%** | **10%** | **6%** | **5%** |
| Reduce laundry water temperature * | **9%** | **6%** | **8%** | **4%** |
| Shift pool/spa pump/filter use * | **14%** | **4%** | **2%** | **7%** |
| Made improvements to home EE * | **7%** | **6%** | **1%** | **7%** |
| Turn up AC temperature * | **5%** | **4%** | **8%** | **7%** |

% is of those reporting any change

Q50: Since signing up for the [program name] have you made any changes in the way you use electricity in your residence?
Q53: Specifically, what have you done since signing up for the new program to reduce your electricity use and costs?

# A majority of residential participants in each rate treatment reports making only one change in energy use

## Number of Any Reported Changes in Electricity Use During the Pilot (Residential)




Calculated by counting the number of actions reported in Q53: Specifically, what have you done since signing up for the new program to reduce your electricity use and costs?

# Residential participants found most of these changes easy to make and most believe they can be permanent changes in energy use

## Ease and Persistence of Reported Changes in Electricity Use During the Pilot By Residential Participants

| | | |
|---|---|---|
| Shift laundry | **73%** | **93%** |
| Use appliances less | **82%** | **88%** |
| Turn off lights | **83%** | **92%** |
| Decrease peak use (general) | **66%** | **78%** |
| Turn AC off/use less | **69%** | **86%** |
| Shifted dishwasher use | **89%** | **93%** |
| Reduce laundry water temperature | **82%** | **100%** |
| Shift pool/spa pump/filter use | **94%** | **95%** |
| Made improvements to home EE | **48%** | **83%** |
| Turn up AC temperature | **73%** | **74%** |

% is of those reporting making each change

Q57A-Q57T: How easy or difficult was it to make the following change? (1="Very easy" to 10 = "very difficult")
Q58A-58T: Would you be willing to make this change permanent?

# C&I participants are less likely overall to report making "any changes" in energy use during the pilot

**Any Reported Changes in Electricity Use During the Pilot By C&I Participants**

| | | |
|---|---|---|
| Any changes in use | **57%** | **50%** |
| Turn lights/equip off when not needed | **53%** | **56%** |
| Turn AC off more | **27%** | **5%** |
| Raise thermostat setting on AC | **13%** | **5%** |
| Replaced lights/fixtures with more efficient | **9%** | **10%** |
| Installed programmable thermostat | **14%** | **0%** |
| Changed hours of operation | **0%** | **17%** |
| Removed lights/reduced wattage | **6%** | **7%** |
| Installed lights/equipment timers | **6%** | **5%** |
| Made improvements to facility EE | **0%** | **10%** |
| Shifted use of equipment to non-peak hours | **0%** | **5%** |

% is of those reporting any change

Q50: Since signing up for the [program name] have you made any changes in the way you use electricity in your residence?/Q53: Specifically, what have you done since signing up for the new program to reduce your electricity use and costs?

# Residential participants (especially in CPP-F and CPP-V) are more likely to report making changes during Critical Peak Periods, though the pattern of reported changes differs across rate treatments

## Reported Changes in Electricity Use During Pilot Critical Peak Periods

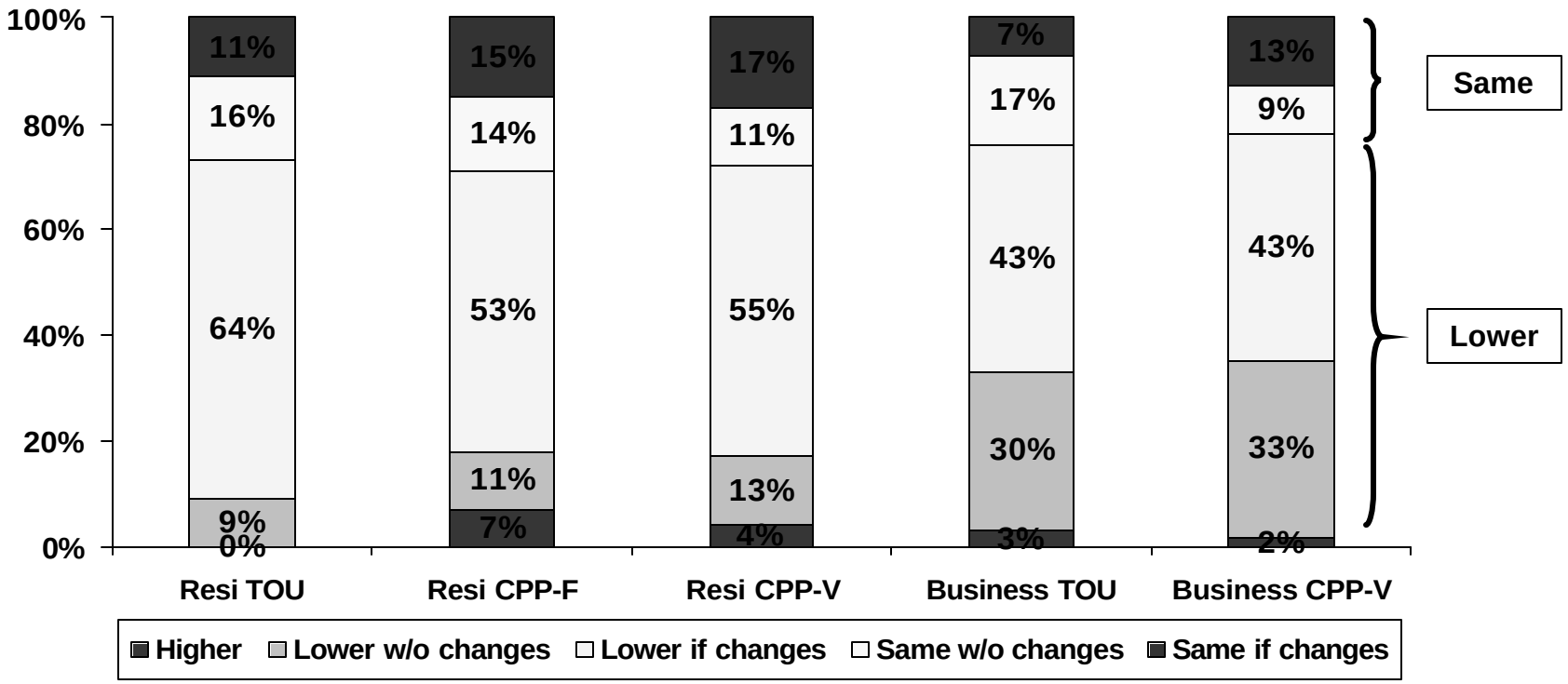
| | | | | |
|---|---|---|---|---|
| **ANY CHANGES IN USE** | 88% | 88% | 73% | 62% |
| Turned off all lights not in use | **22%** | **20%** | **33%** | **--** |
| Turned off AC | **19%** | **33%** | **27%** | **--** |
| Limit use of small appliances | **20%** | **11%** | **24%** | **--** |
| Did not do laundry | **18%** | **15%** | **18%** | **--** |
| Turned off all appliances | **16%** | **12%** | **14%** | **--** |
| Turned off TV/computer | **11%** | **13%** | **15%** | **--** |
| Did not use stove/oven | **10%** | **11%** | **12%** | **--** |
| Did not run dishwasher | **8%** | **8%** | **6%** | **--** |
| Turned everything off | **9%** | **6%** | **6%** | **--** |
| Did not run pool/spa pump | **6%** | **11%** | **3%** | **--** |
| Turned up AC thermostat/left building | **7%** | **7%** | **13%** | **53%** |

% is of those reporting any change

Q67: Did you change the way you use electricity during the Super Peak/Critical Peak Periods?/Q68: What changes did you make during Super or Critical Peak Periods? (multiple responses)

# As might be expected among customers who voluntarily enrolled, a majority of participants in each condition expected their bills to go down, though more C&I participants expected this to happen without having to make any changes in the way they use energy

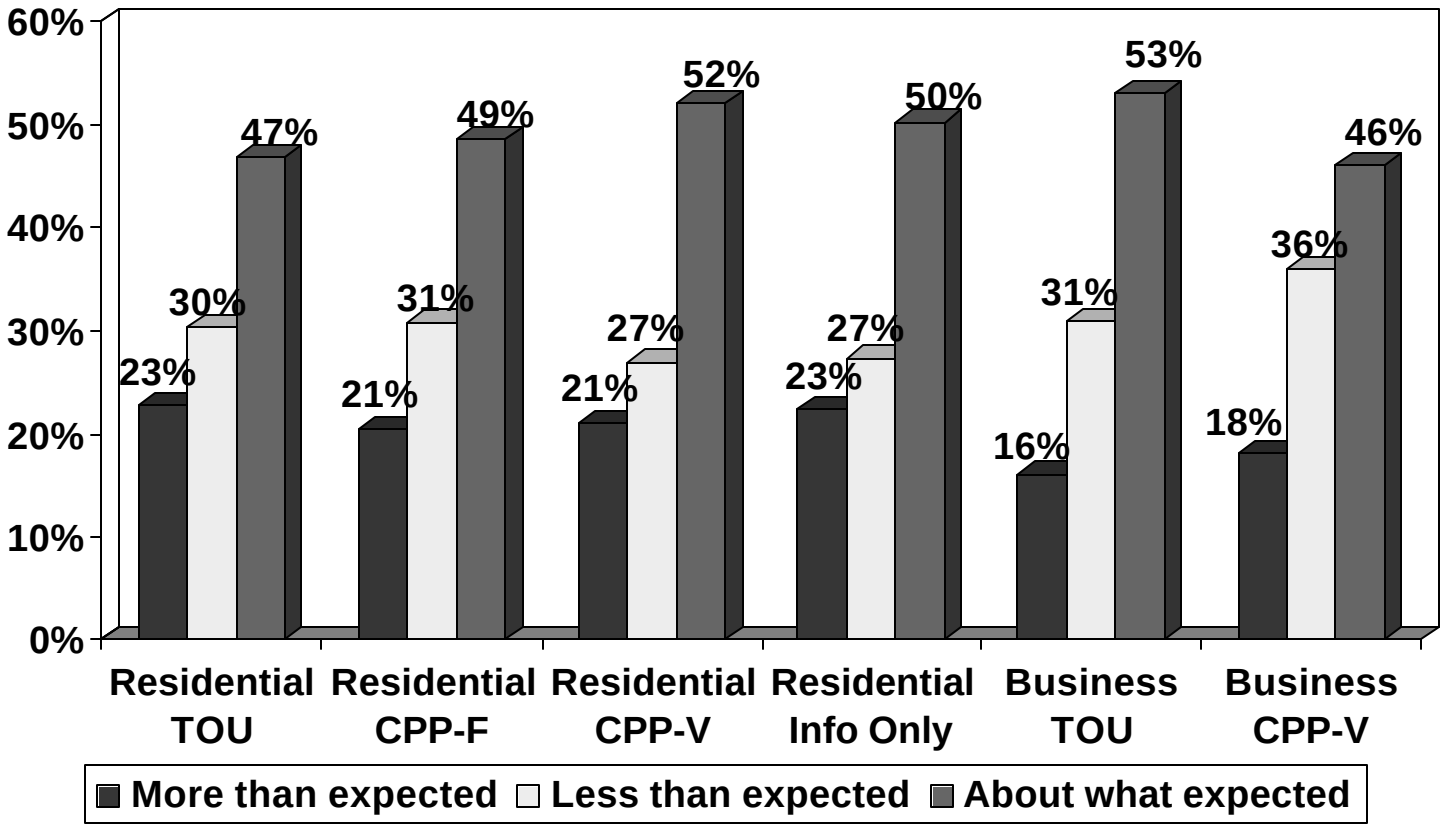
## Expected Changes in Bill by Condition




Q36: After receiving all of the program materials, did you think your average monthly electricity bill under the new plan would be higher, lower, or stay about the same as under your old plan? Q38/Q39: Did you think your average monthly bill would [go down/stay the same] without making any changes in the way you use electricity or did you think you would have to make changes to [lower your utility bill/keep your utility bill the same under the new program]?

# Participants most commonly – across all rate treatments – say their bills were about what they expected, with 27-36% saying their actual bills were lower than they expected

## New Bill vs. Expectations by Rate Treatment




Q82: Is your monthly bill under the new program more, less, or about what you expected?

# Section 2:
# Participant Reaction to the Enrollment/Program Education Process and Materials

# Reaction to Program Materials - Key Takeaways

- **Program participants' impressions of the enrollment materials were generally positive with relatively small differences across conditions**
  - Self-selection bias may have skewed results toward positive perceptions because those with negative impressions did not enroll
  - C&I participants rated the materials positively but less so than did residential participants
  - Considering the entire enrollment package, a majority of participants say the enrollment materials explained everything well

- **The single MOST important reason for participating in the pilot was saving money/lowering their bill**

- **The appreciation payment was also a significant motivator of program participation for both residential and C&I participants**

# Reaction to Program Materials - Key Takeaways (continued)

- **Overall, both residential and C&I participants thought the Welcome Package did a thorough job of explaining the pilot program**
- **Ratings of the education materials were quite positive, though C&I participants ratings are lower than those of residential participants**
- **While participants were able to state key learnings from materials, many were unable to recall details of the package**
- **Perceived effectiveness of the educational materials appears to be linked, at least somewhat to changes in energy use**
  - Both residential and C&I participants who score higher on the effectiveness measure (which means they read the materials and rated them as accurate, easy to understand, etc.) were more likely to report changing their energy use during the pilot program
  - The link between high effectiveness scores and energy use changes during Critical Peak periods is considerably weaker

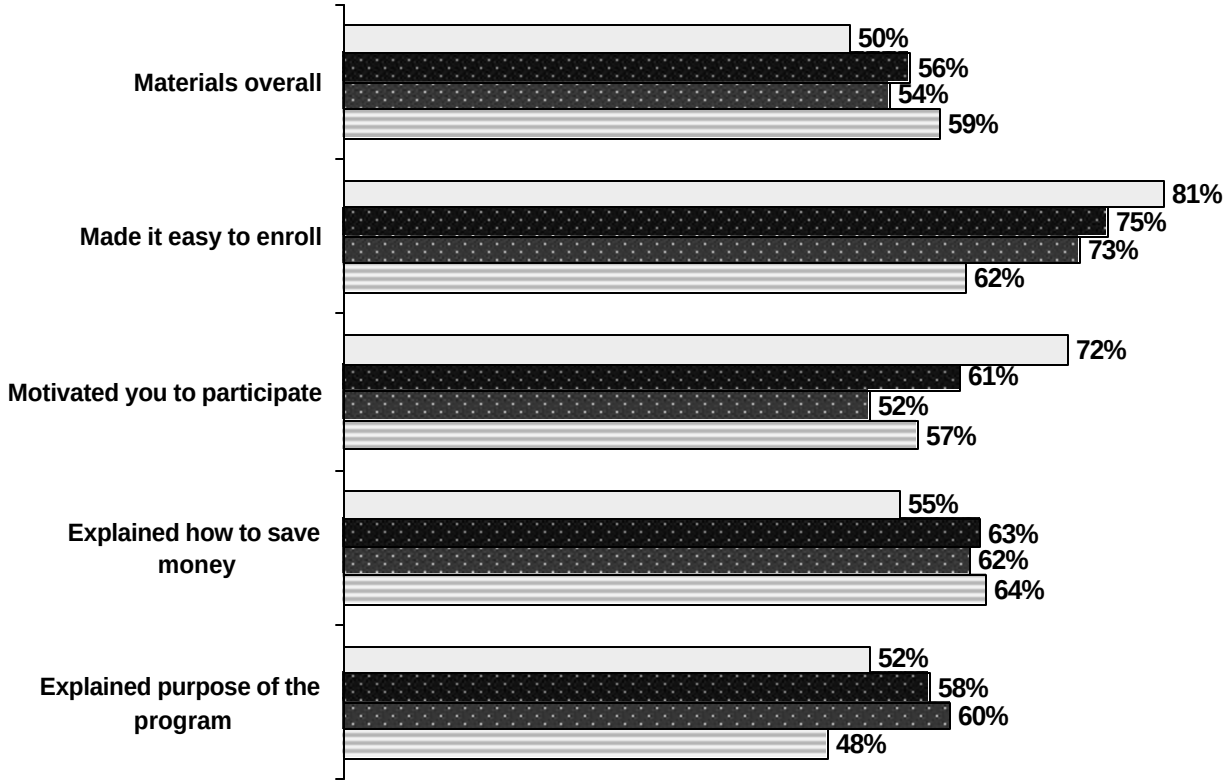
# Reaction to Program Materials - Key Takeaways (continued)

- **The accuracy of understanding of the pilot program varies across conditions among residential participants**
  - CPP-V participants demonstrate higher accuracy rates while Information only participants demonstrate lower rates of understanding for their program
- **C&I participants do not appear to have a very accurate understanding of pilot program pricing**
- **The accuracy of understanding that residential and C&I participants have of the pilot program does appear to be linked to changes in energy use either during the program in general or during Critical Peak periods**

# As might be expected from those voluntarily enrolling, residential participant impressions of the enrollment materials were positive

## Residential Participant Impression of Enrollment Materials

(% Rating 9/10)

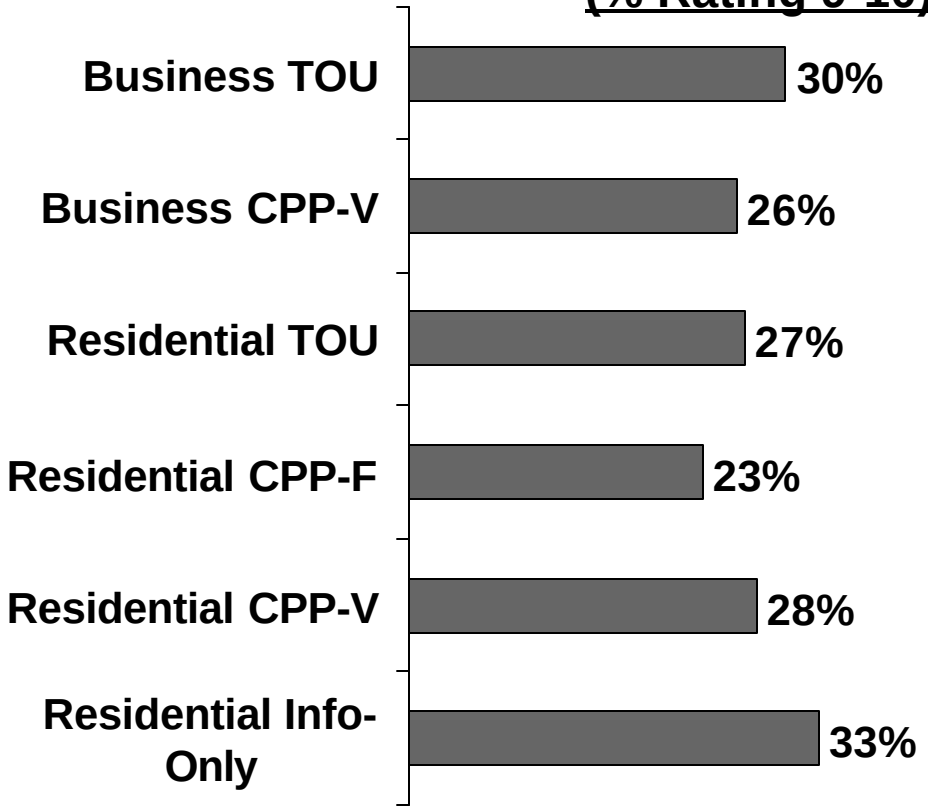



Responses to other items (e.g.: "easy to read," "answered questions," "motivated you to change electric usage") were similar (with approximately 50% of residential participants in each condition rating the materials as 9/10 on each attribute.

Q8A-Q8K How would you rate these materials [ letter from your utility company, a Q&A information sheet, and an enrollment card. (1=materials performed poorly, 10=materials were excellent)

# The appreciation payment does appear to have been a significant motivator of program participation across all participant groups

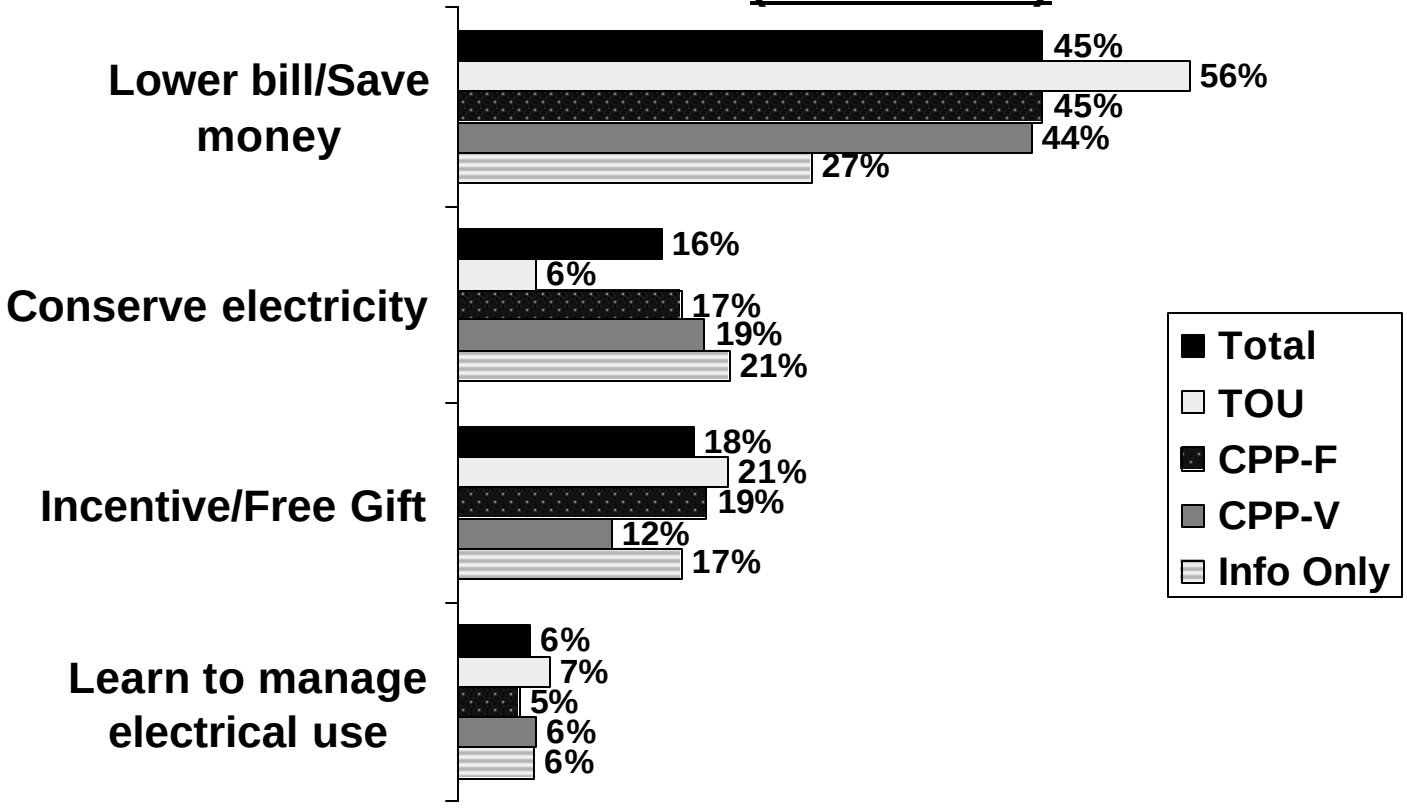
## Likelihood of Signing Up Without Appreciation Payment (% Rating 9-10)




Q94. How likely would you have been to sign up for the new program if you had not been offered an appreciation payment? (1= Would definitely **NOT** have signed up without the appreciation payment; 10=Definitely **WOULD** have signed up for the program without the appreciation payment,)

# Lowering the bill/saving money was most often named as the single MOST important reason for participating in the pilot across the residential conditions

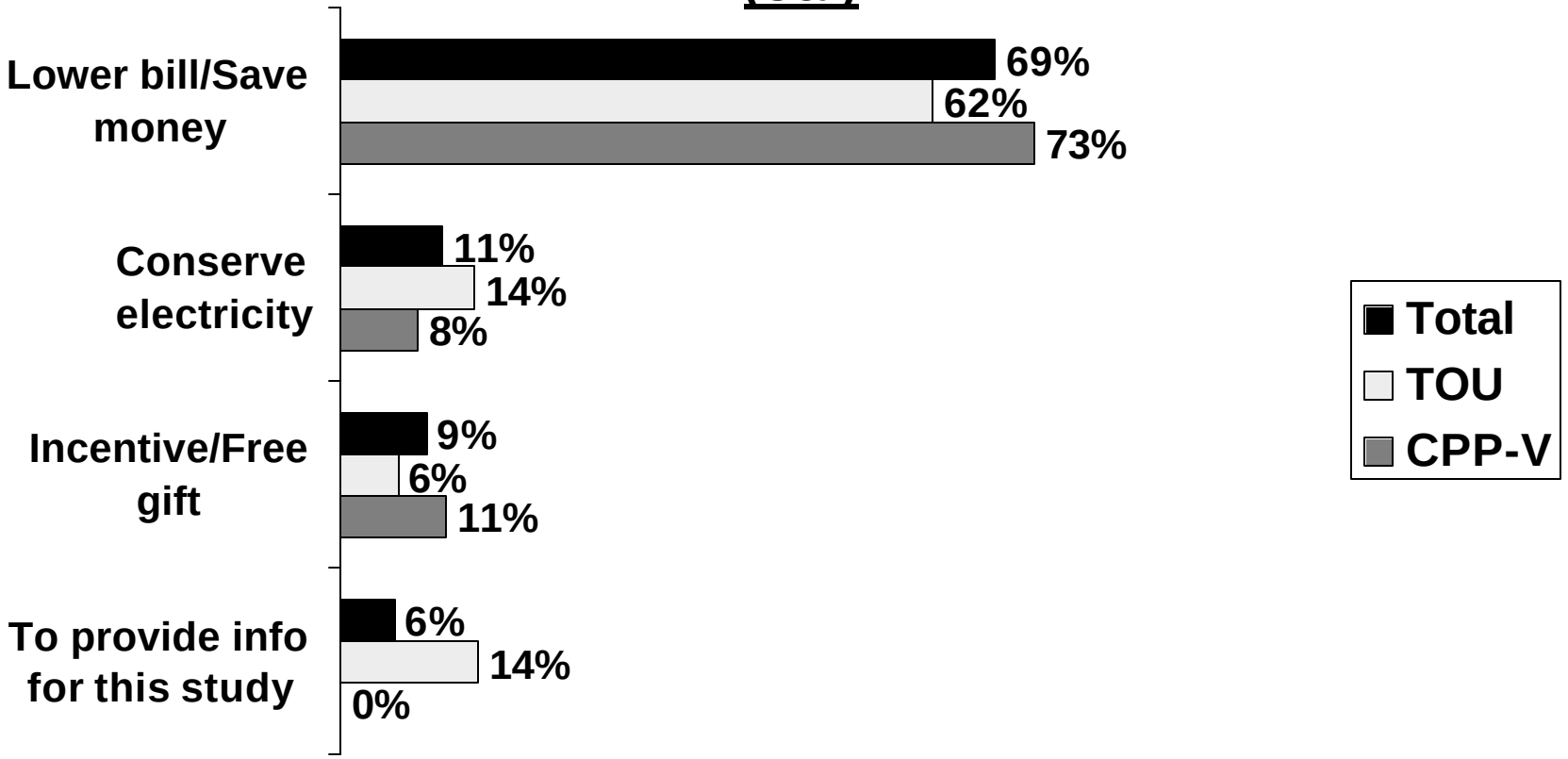
## Most Important Reason for Participating in the Pilot (Residential)




Q35. Of the reasons you just mentioned, which was most important?

# Lowering the bill/saving money was also the primary driver for program participation in both C&I conditions

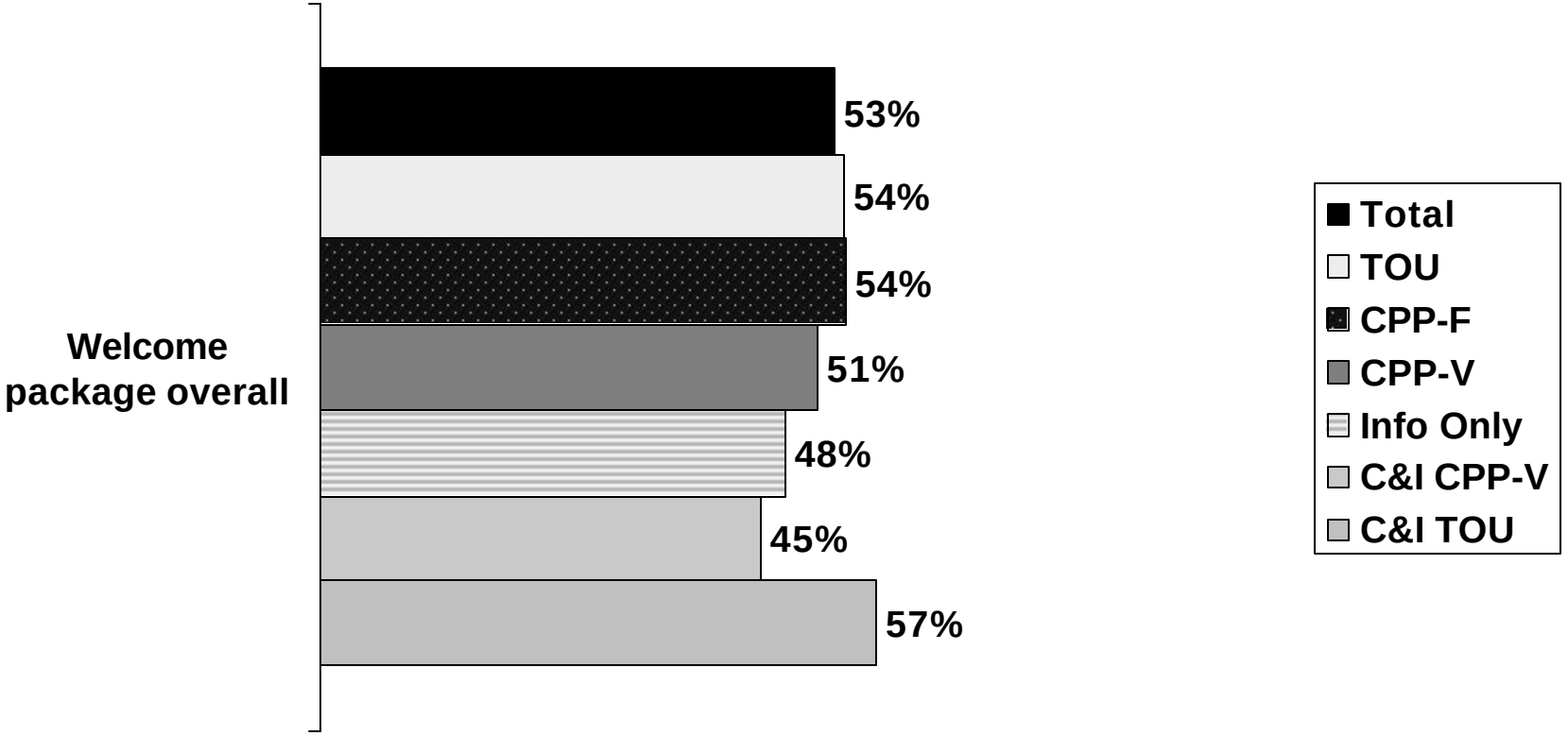
## Most Important Reason for Participating in the Pilot (C&I)




Q35. Of the reasons you just mentioned, which was most important?

# Overall, participants' ratings of the educational materials (Welcome package) were quite positive

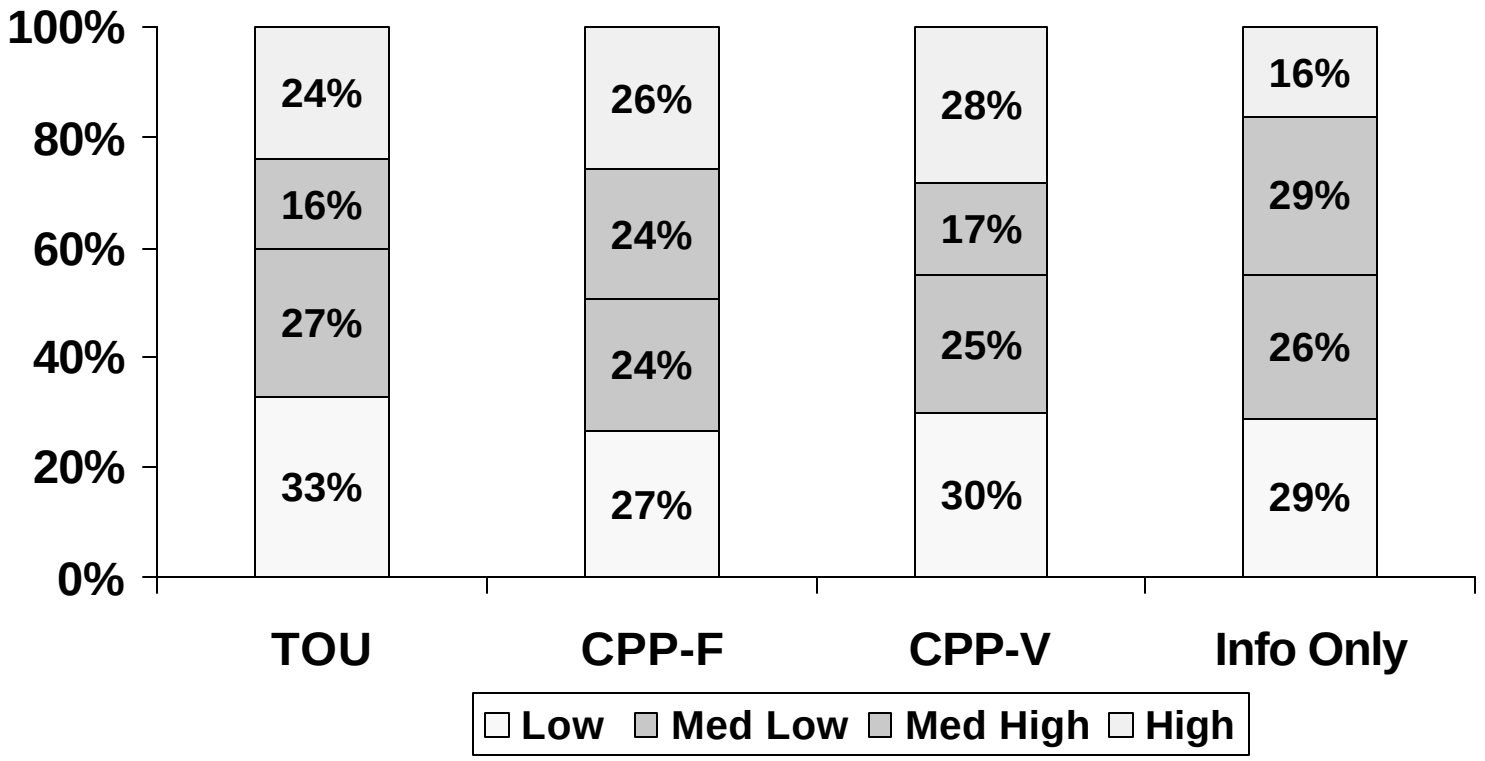
## Participant Ratings of Program Education Materials (% Rating 9/10)




Q22A-22J. Still thinking about the Welcome Package, how would you rate it on the following factors? (1=materials performed poorly, 10=materials were excellent).

# Perceived effectiveness of the educational materials is similar across residential conditions, although fewer Information only participants rate “high” on this measure

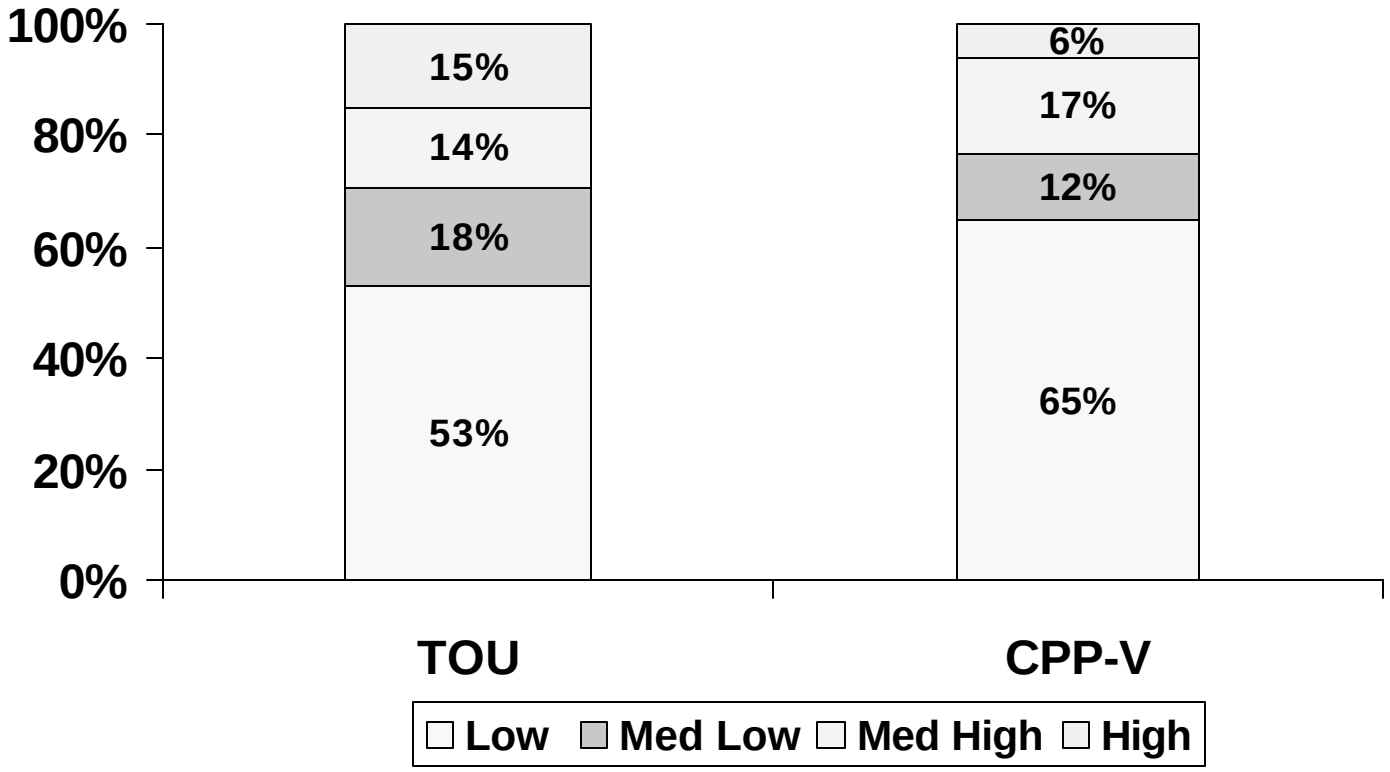
## Perceived Effectiveness of Educational Materials (Residential)




Index score was created from Q8a,Q8d, q8e,Q8h, Q8k, Q18,Q19, Q22a-22e,Q22g-h, Q22j, Q24, Q25: See appendix for details.

# Among C&I participants, the perceived effectiveness of the materials is much lower

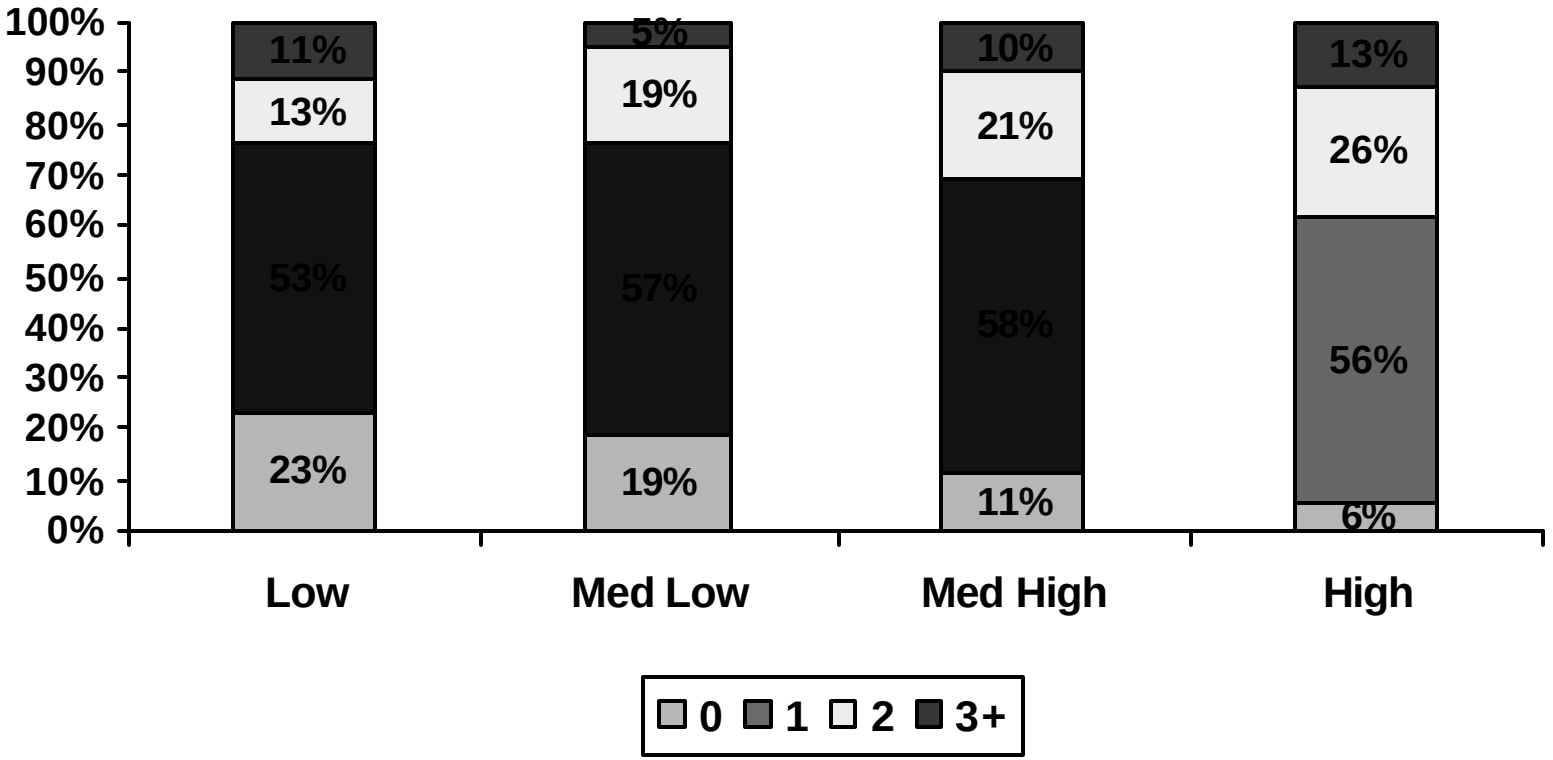
## Perceived Effectiveness of Educational Materials (C&I)




Index score was created from Q8a,Q8d, Q8h, Q8k, Q18,Q19, Q22a-22e,Q22g-h, Q22j, Q24, Q25: See appendix for details.

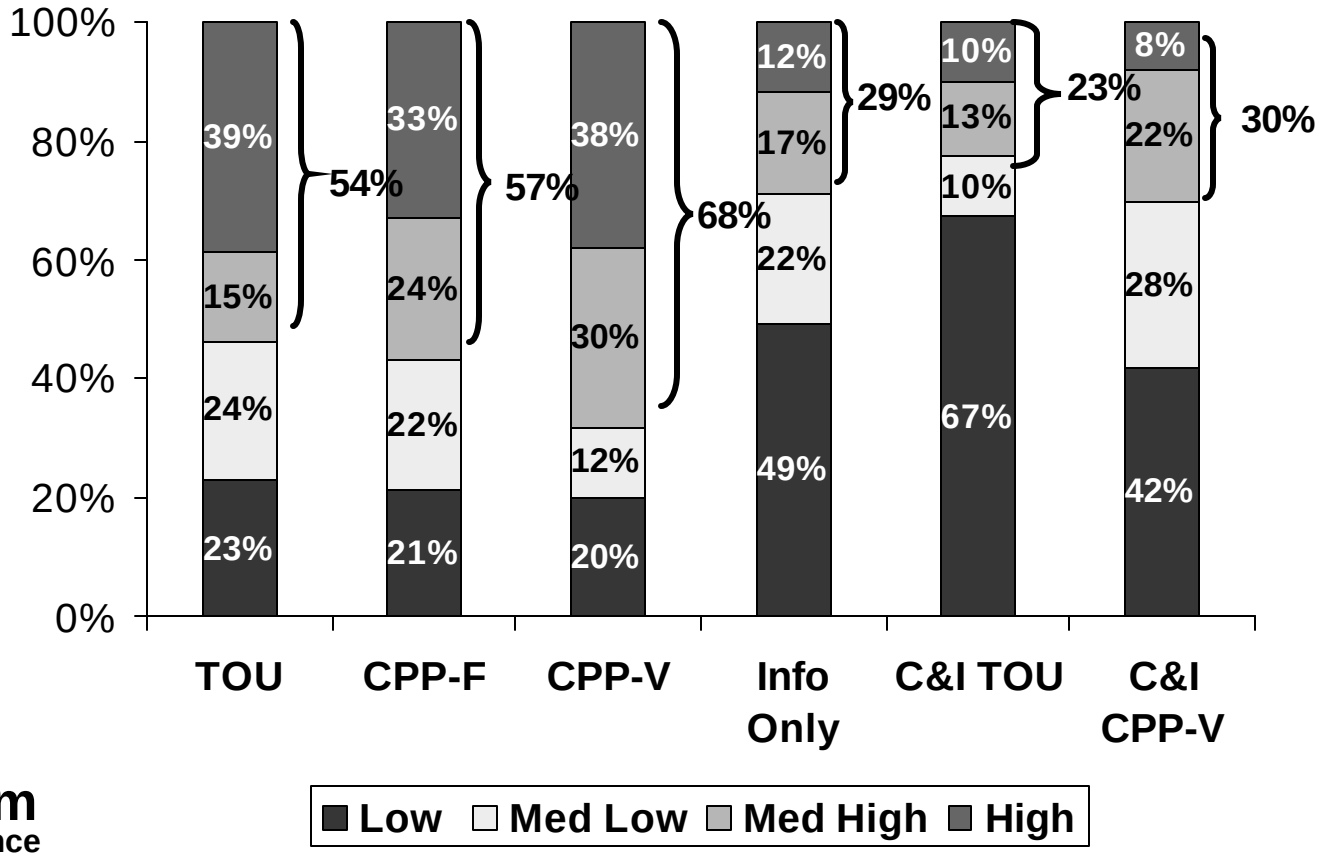
# Residential participants who score higher on the materials effectiveness measure are more likely to report taking any, and more, actions to change their energy use during the pilot program

## Number of Any Changes in Electricity Use by Perceived Effectiveness of Educational Materials (Residential)



# The accuracy of understanding their pricing program varies across conditions, with residential CPP-V participants demonstrating the highest level of accuracy and residential information-only and C&I participants showing lower levels of understanding

## Accuracy of Understanding of Pricing Program (Residential)

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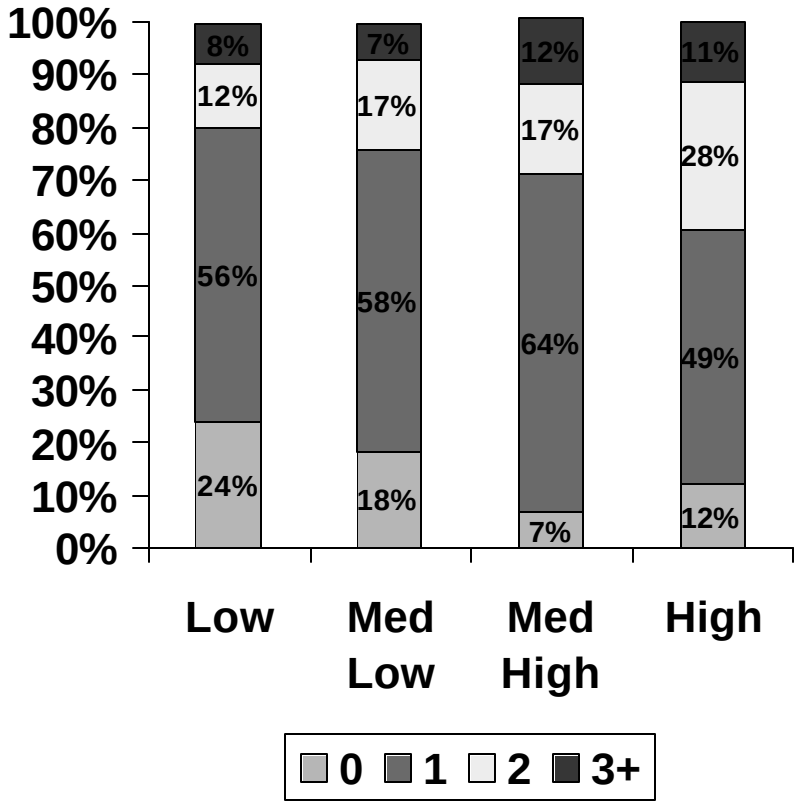
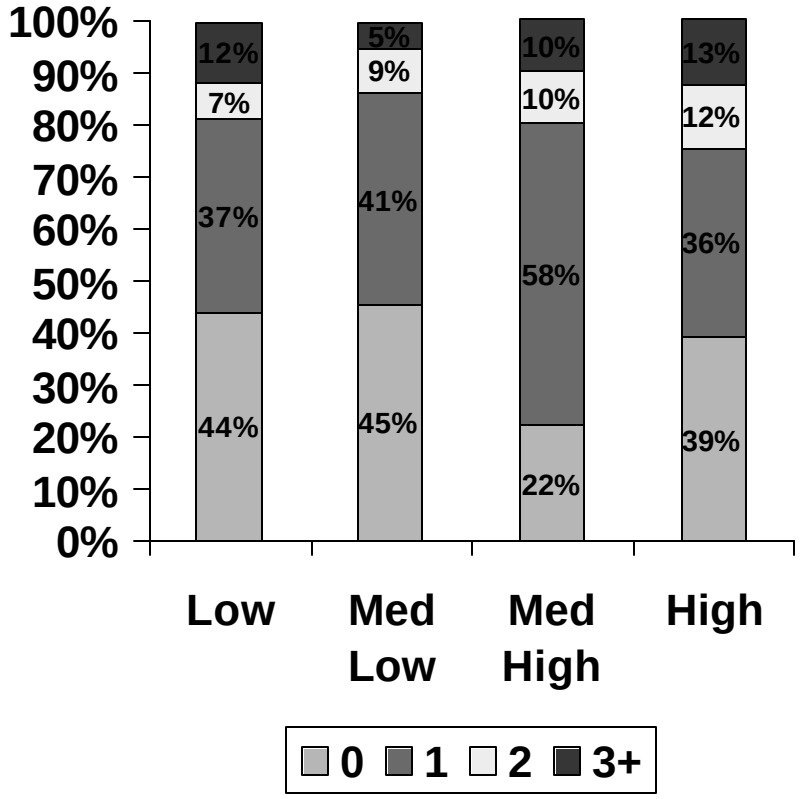
*e-intelligence @ the speed of thought*

# Residential participants who score higher on the accuracy of understanding program pricing are more likely to report taking any, and more actions to change their energy use during the pilot program and during Critical Peak periods.

**Number of Any Changes in Electricity Use by Accuracy of Understanding of Program Pricing (Residential)**




**Number of Critical Peak Changes in Electricity Use by Accuracy of Understanding of Program Pricing (Residential)**




**Momentum**
**Market Intelligence**

*Excludes Information Only participants

# Section 3:
# Participant Reaction To Other Critical Program Elements

# Reaction to Other Program Elements - Key Takeaways

- **A majority of all program participants did not visit the program website**
  - Reasons given for not using the website were no interest/no need, no internet access, and no time
  - The primary reasons for visiting the website were to access usage information and obtain tips for reducing electricity use
  - C&I website users were more likely to find what they needed on the website than were residential visitors to the site
- **Relatively few participants (12% to 31% across programs) called the Research Support/Energy Information Center with questions**
  - Calls to the Center were highest among residential participants on the more complex CPP-V and CPP-F programs
  - Callers typically gave the Center good performance ratings, but scores were lower for the ability to explain bill changes for CPP-V and Information Only participants
- **A surprisingly low percentage of both residential and C&I program participants remembered receiving a comparison bill (range: low of 14% for C&I TOU participants to a high of 44% for residential TOU participants)**
  - C&I participants found the comparison bill more useful in helping them manage electricity use than did residential participants
  - Ratings of bill usefulness also varied by program type

# Reaction to Other Program Elements - Key Takeaways

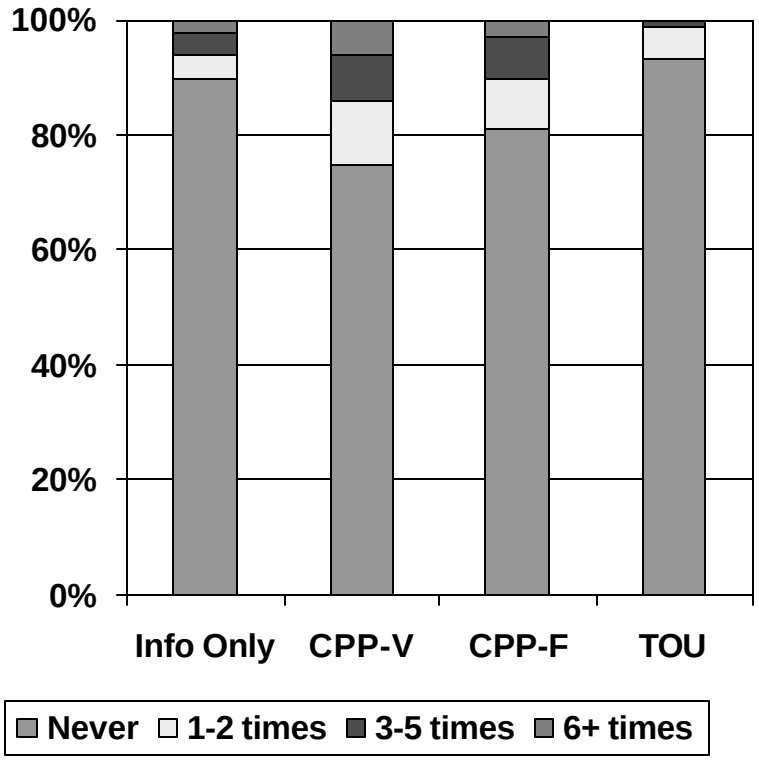
- **A majority of both residential and C&I participants like the new bill design**
  - Ratings for the new design attributes were highest for Usefulness of Peak/Off-peak Information and Easy to Understand
  - While still favorable, ratings were lower for “Helpful in Directing Changes in Energy Use”
  - Those disliking the new bill design find it confusing and too long
  - Suggestions for improvements focused on making the information more concise
- **Notification for critical/super peak periods is most often given by telephone**
- **Satisfaction is high with current notification methods**
- **Advance notice for critical/peak periods is typically perceived as adequate**
  - Those in the CPP-V program who receive only 4-hours advance notice were least likely to consider their notice adequate
  - The most acceptable timeframe for advance notice was one full day
- **Program participants do not have good recollection of how many critical/ super peak notifications they received during the pilot program, with responses ranging from none to twenty-five**

# Key Section 3 Takeaways

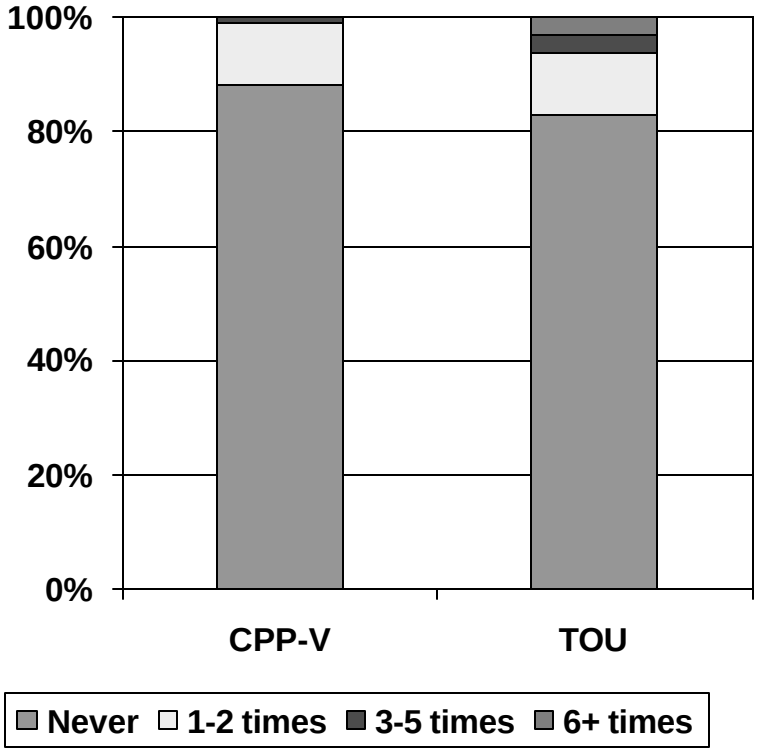
- **Perceptions of the meter installation process differed between residential and C&I participants**
  - A large majority of residential participants reported having new meters installed in their households
  - Satisfaction with the installation process was very high
  - Only one-third of the C&I CPP-V participants and less than 20% of the C&I TOU participants reported having a new meter installed
  - About two-thirds of all program participants (residential and C:&I) had not checked their new electricity meter since its installation
  - Less than 10% of the households and none of the businesses reported having problems with the new meters
- **Residential CPP-V participants most often identify a programmable thermostat as their automated control device.**
  - One-third of the respondents in this program group didn't know if or what device had been installed
  - When asked if they were satisfied with how the control device automatically adjusted electricity usage during critical/super peak periods, a majority were highly satisfied

# A large majority of program participants never used the program website; CPP-V residential participants were most likely to visit

**Website Usage**
**- Residential -**



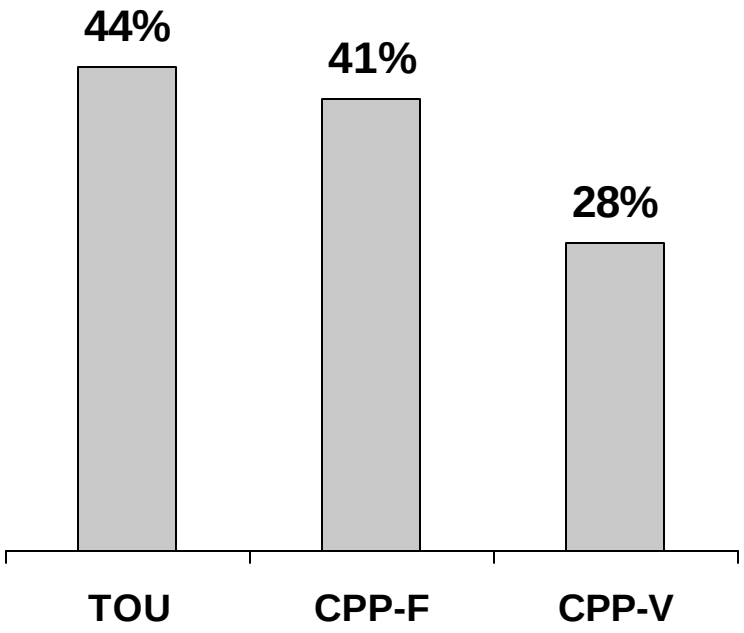

**Website Usage**
**- Commercial/Industrial -**



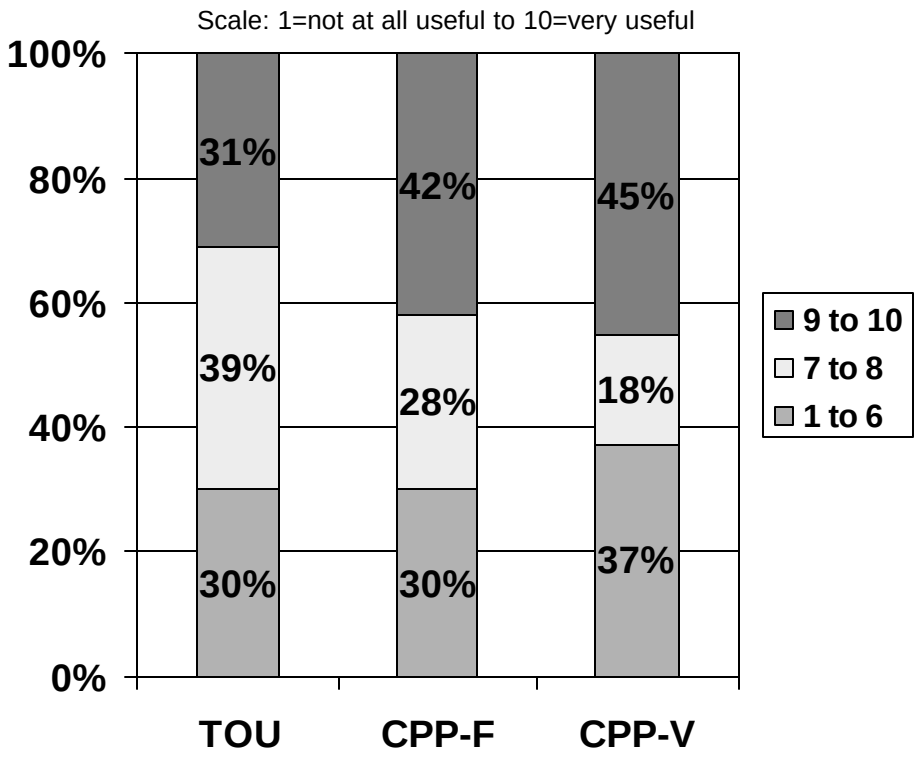

Q40: Have you visited the utility's website to learn more information about the program?/Q41: About how many times have you visited that website since signing up?

# Surprisingly few residential participants reported receiving a comparison bill; of those who recall such a bill, TOU participants were somewhat less likely to give high ratings

## Percent Receiving Comparison Bill



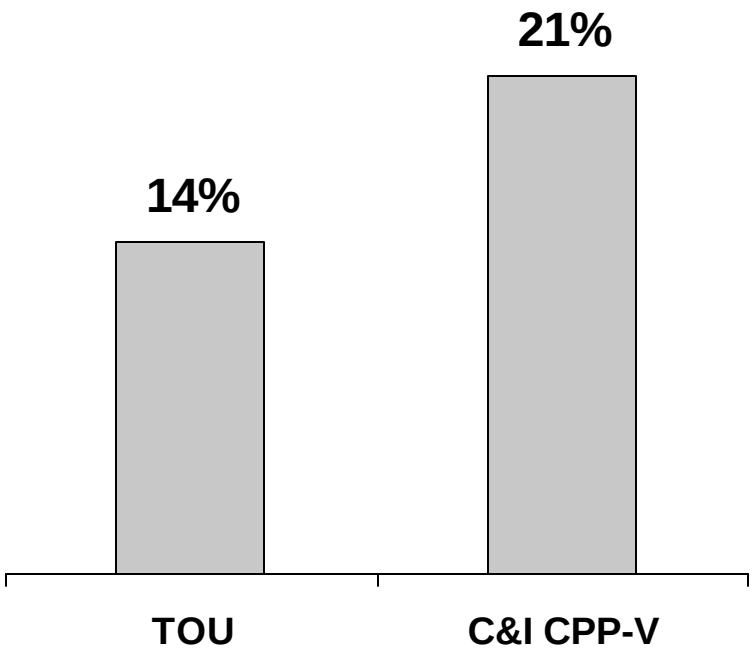

## Usefulness of Comparison Bill




Q47. Have you received a comparison bill that showed what your monthly electricity costs would have been under your old electricity pricing program along with your electricity costs under the new program? (if yes) Q48. How would you rate the usefulness of the comparison bill in helping you to manage your electricity use?

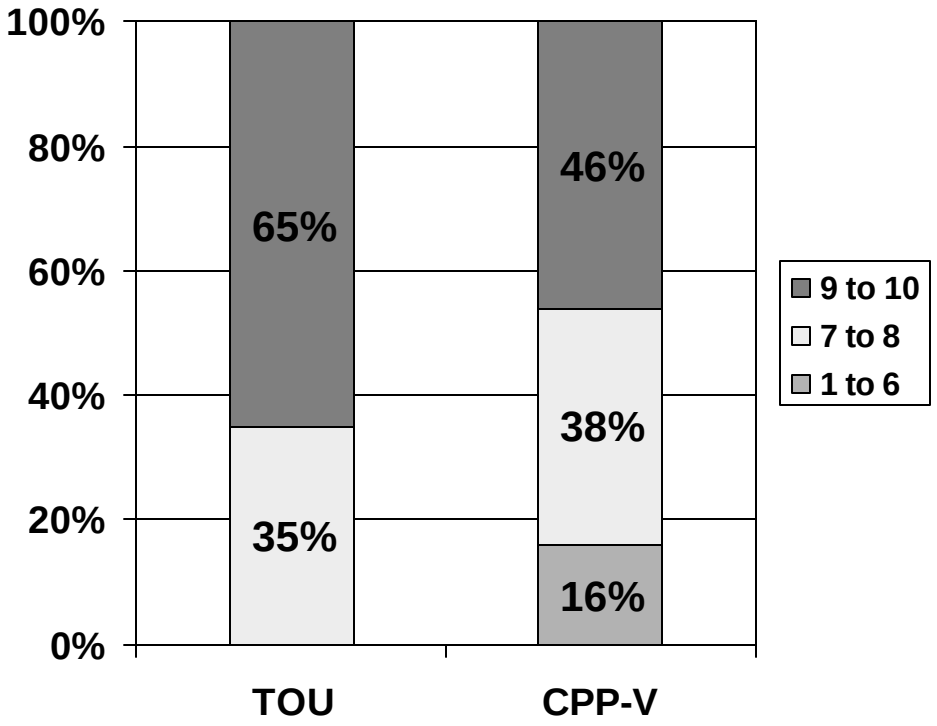
# Fewer than one-fourth of C&I CPP-V and TOU participants say they received a comparison bill; but, of those who had seen one, most say it was useful, especially among TOU participants

## Percent Receiving Comparison Bill




## Usefulness of Comparison Bill

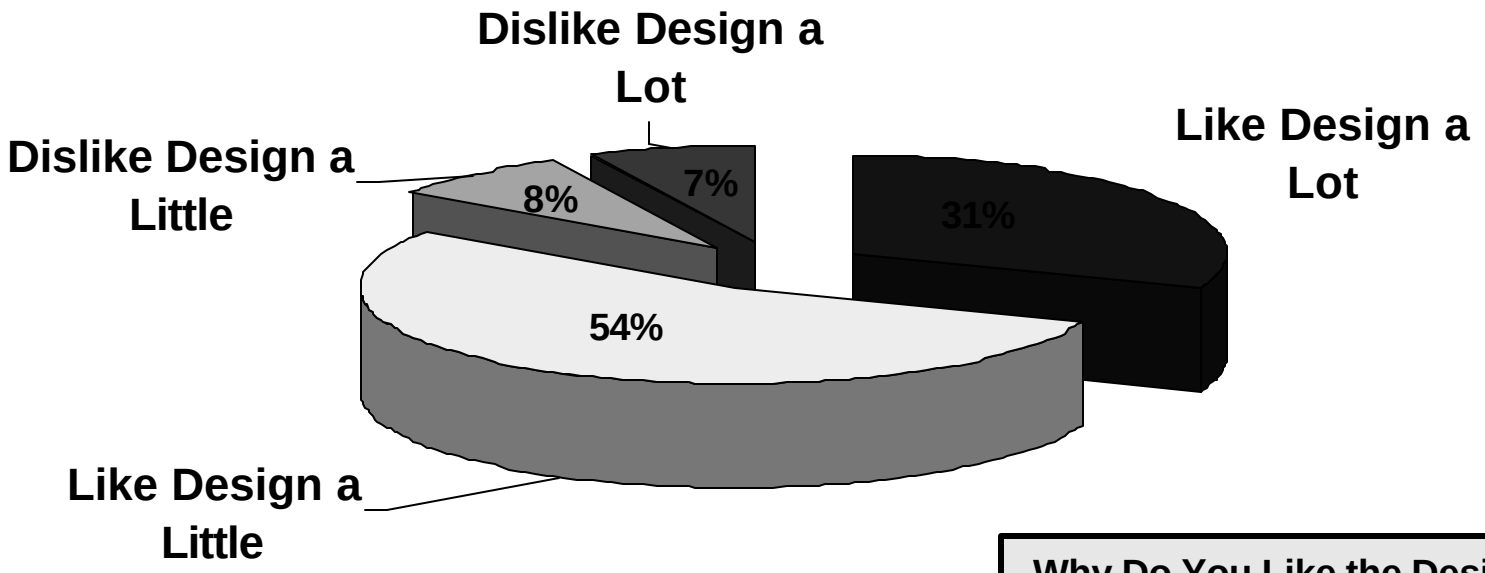
Scale: 1=not at all useful to 10=very useful




Q47. Have you received a comparison bill that showed what your monthly electricity costs would have been under your old electricity pricing program along with your electricity costs under the new program? (if yes) Q48. How would you rate the usefulness of the comparison bill in helping you to manage your electricity use?

# Reaction to the new bill design is positive, if not always enthusiastic among residential participants

## Residential Participants Reactions to The New Bill Design



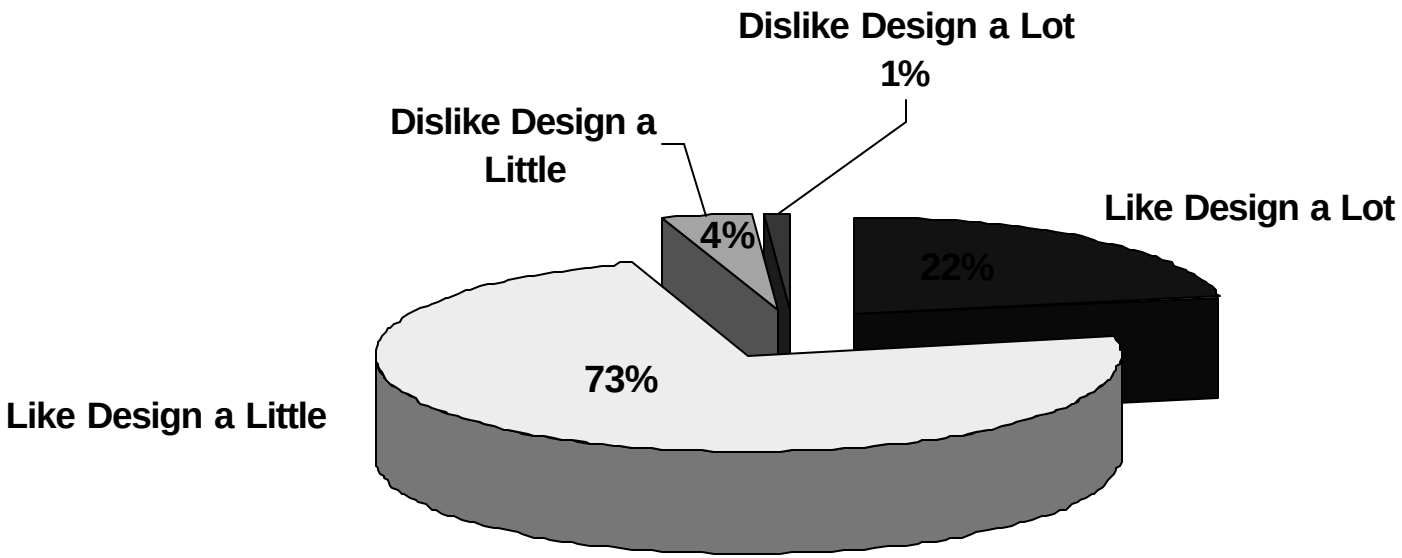

| Why Do You Dislike the Design? | |
|---|---|
| Confusing | 93% |
| Too long | 83% |

| Why Do You Like the Design? | |
|---|---|
| Easy to read | 24% |
| Good information | 9% |
| Shows usage | 7% |

Q83: Next, Please think about the format and content of the new billing statements you receive under this plan. Do you:/Q84: Why do you feel that way?

# Commercial/industrial participants also liked the new bill design

## C&I Reactions to The New Bill Design



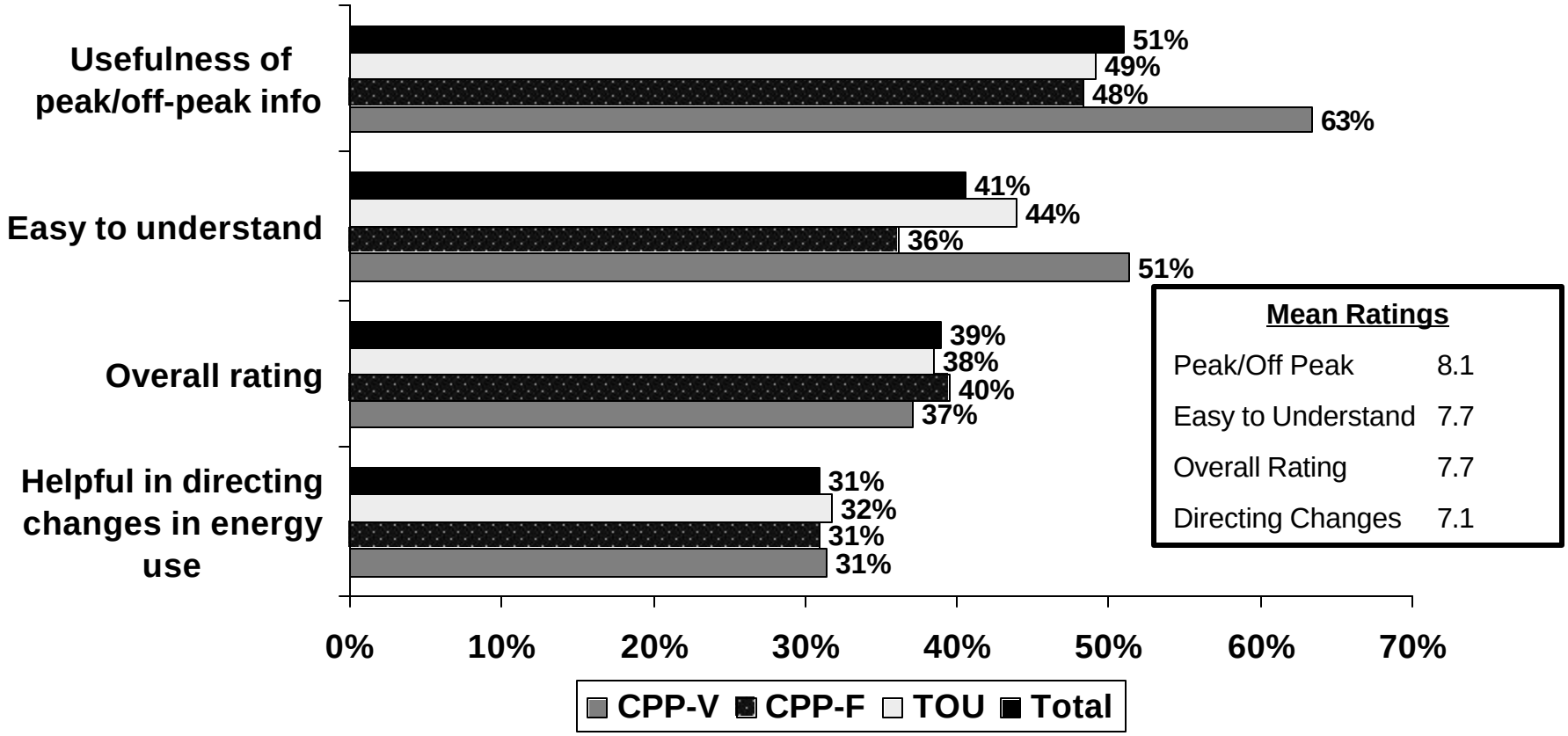

| Why Do You Dislike the Design? | |
|---|---|
| Confusing | 25% |
| Too long | 17% |

| Why Do You Like the Design? | |
|---|---|
| Clear/Easy to Read | 31% |
| It's fine/just a bill | 25% |
| Good Information | 7% |

Q83: Next, Please think about the format and content of the new billing statements you receive under this plan. Do you:/Q84: Why do you feel that way?

# CPP-V households gave more top ratings for "usefulness of peak/off-peak information" and "easy to understand," while other ratings did not vary by condition

## Residential Participant Top Box Ratings of New Bill Design Condition

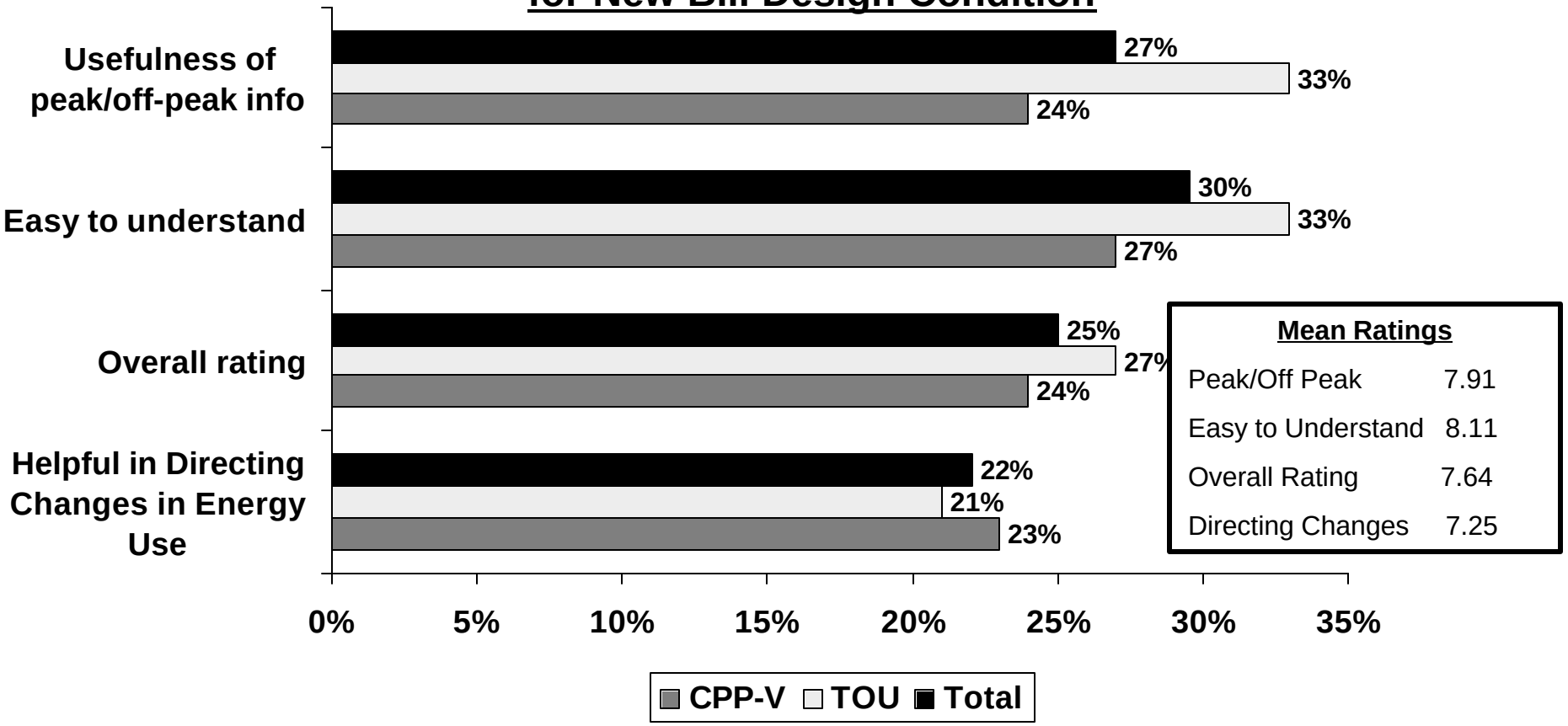



Q85A/Q85D: How would you rate the new billing format on the following factors: 1=Poor/10=Excellent

# Overall, C&I participants gave fewer top scores, and unlike residential, TOU ratings were generally higher than CPP-V ratings

## C&I Participant Top Box Ratings (scores of 9-10)

## for New Bill Design Condition




Q85A/Q85D: How would you rate the new billing format on the following factors: 1=Poor/10=Excellent

# Telephone is main method for notifying residential participants of super/critical peak periods and a large majority are satisfied with their current method of notification

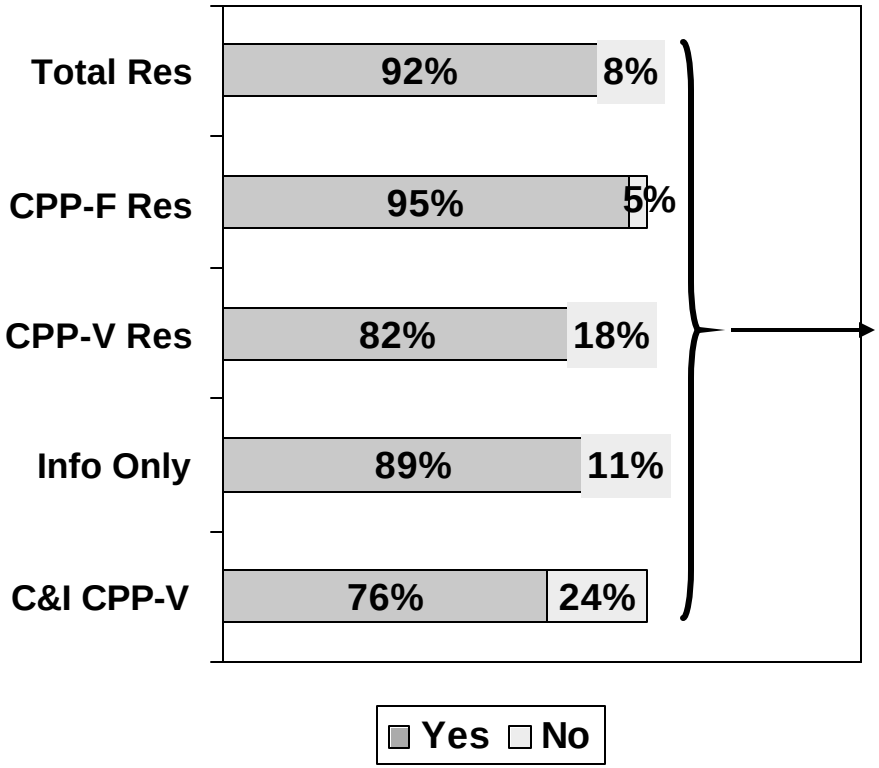
## Residential: Satisfaction with Notification Methods

| | % Using Notice Method | % Users Satisfied With Method | Preferred method if unsatisfied |
|---|---|---|---|
| By telephone | 93% | 93% | E-mail |
| By e-mail | 21% | 97% | Other |
| By cell phone | 5% | 92% | E-mail |
| By mail | 4% | 67% | Telephone, e-mail |
| Other/Pager | 1% | 100% | -- |

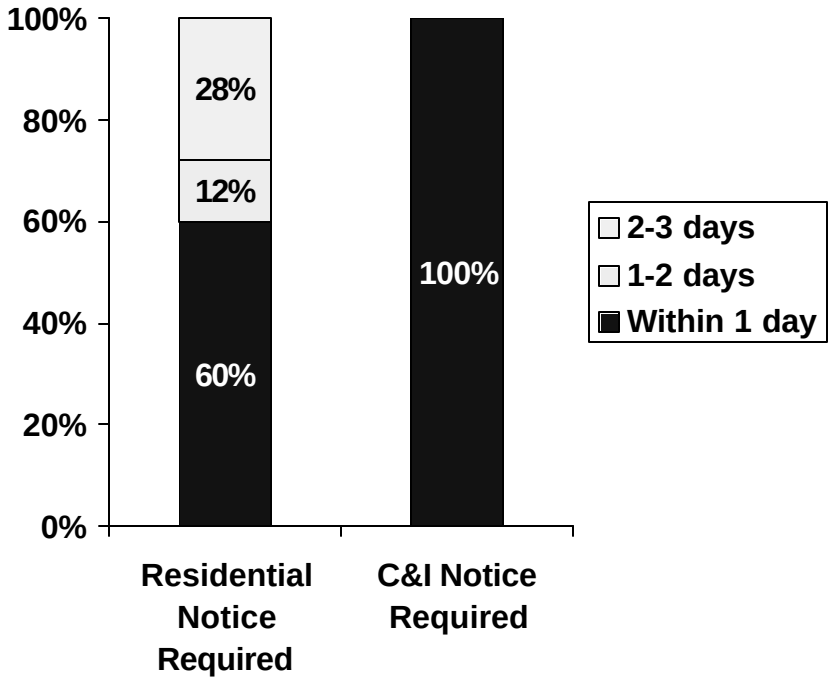
Q60: How were you notified about these Super/Critical Peak Periods?/Q61: Are you satisfied with this notification method or would you prefer some other form of notification?/Q62: What form of notification would you prefer?

# Most participants considered their notice of super/critical peak periods adequate. CPP-V participants who received only 4-hours notice were less satisfied. For most, one day notice was required

## Adequacy of Advance Notice



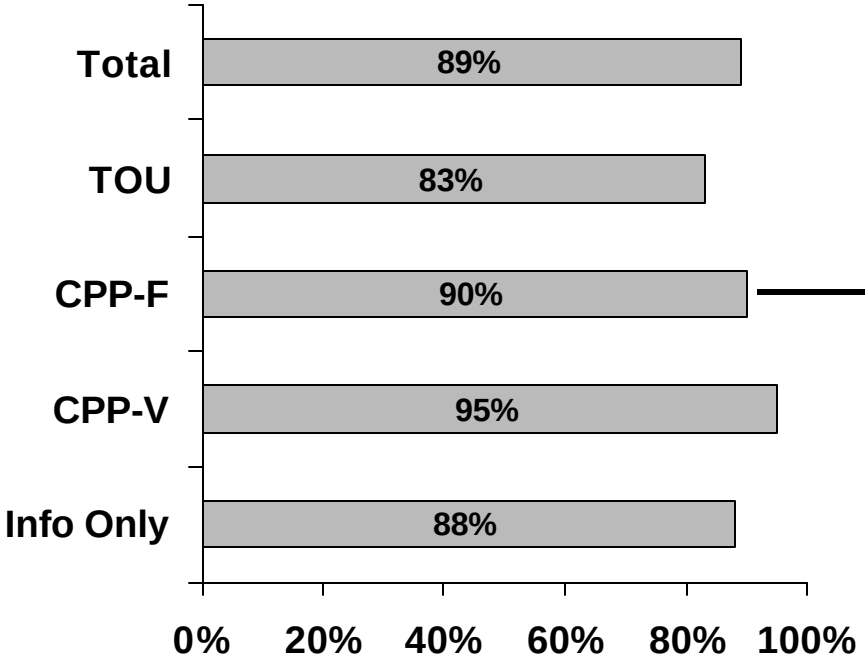

## Required Notice




Q64: Were you given enough notice before Super Peak/Critical Peak periods to allow you to change your electricity use if you wanted to?/ (If not)/Q65: How much advanced notice do you need?

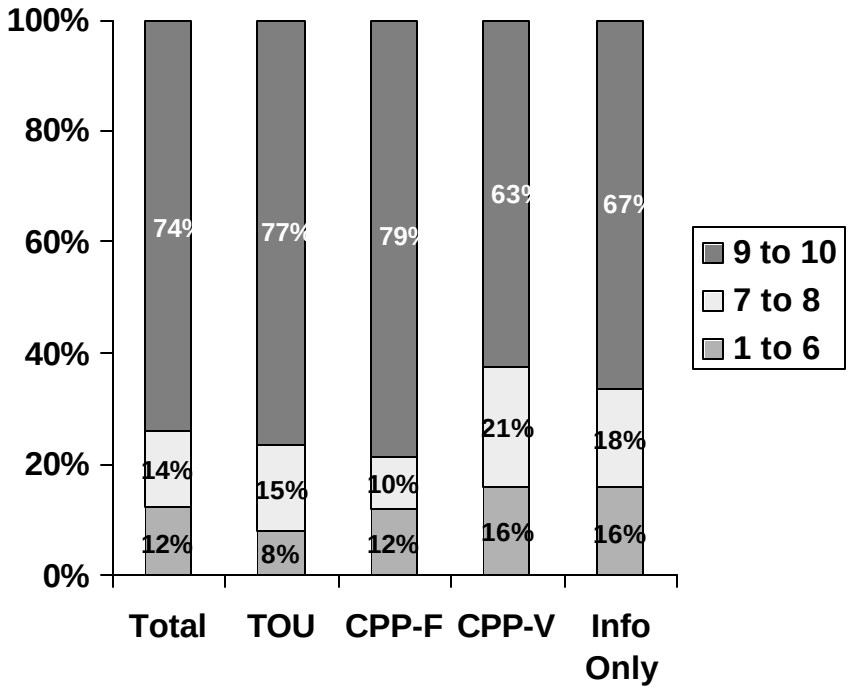
# Utilities installed new meters in most households and participants were usually very satisfied with the installation process

## Percent with New Meter Installed




## Level of Satisfaction with Installation Process

**(Scale: 1= Very Dissatisfied to 10 = Very Satisfied)**

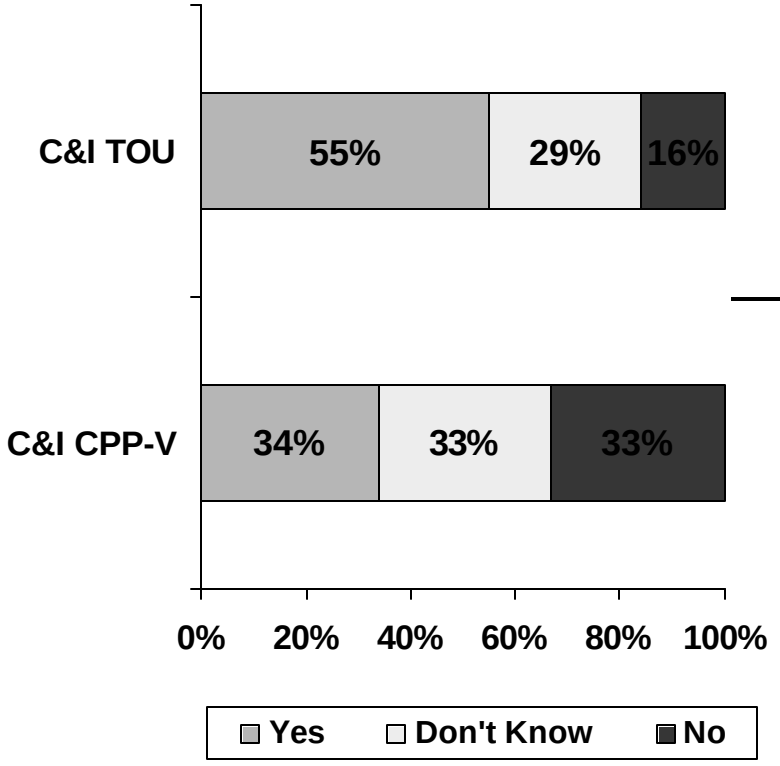



**Momentum**
**Market Intelligence**

Q70: As part of the pilot program, did the utility install a new meter for your house? (If yes) Q71. How satisfied are you with the overall process for having this meter installed at your house?

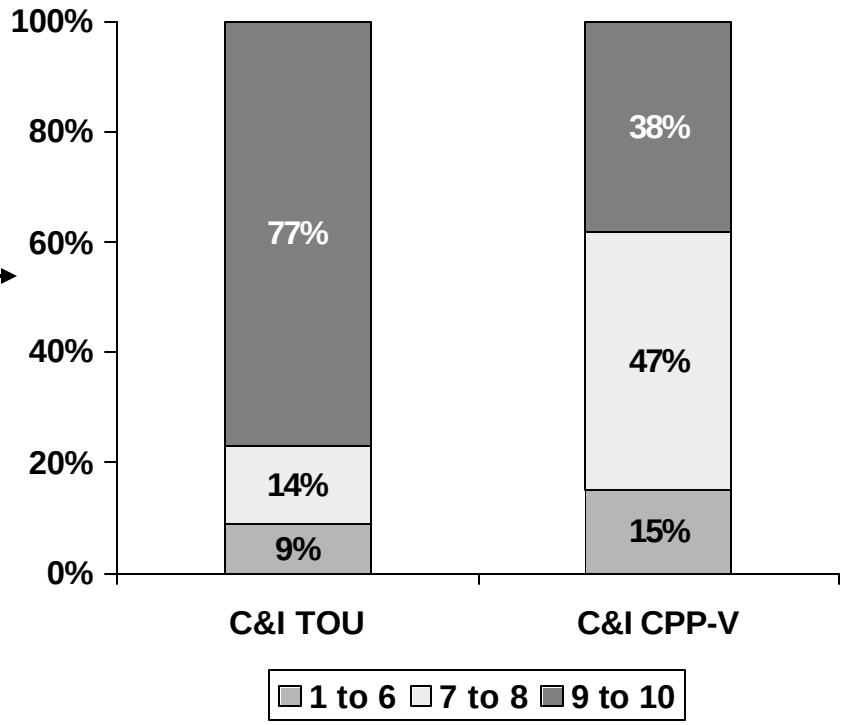
# Many C&I participants did not know if a new meter had been installed; CPP-V participants were less satisfied with the installation process

## Was a Meter Installed?




## Level of Satisfaction with Installation

(Scale: 1= Very Dissatisfied to 10 = Very Satisfied)

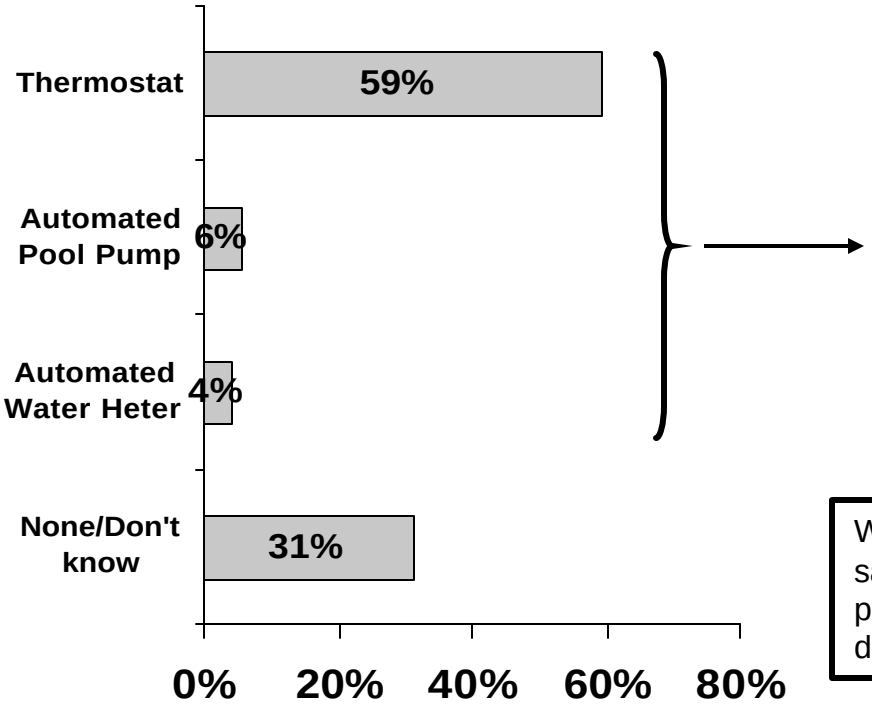



**Momentum**
**Market Intelligence**

Q70: As part of the pilot program, did the utility install a new meter for your house? (If yes) Q71. How satisfied are you with the overall process for having this meter installed at your house?

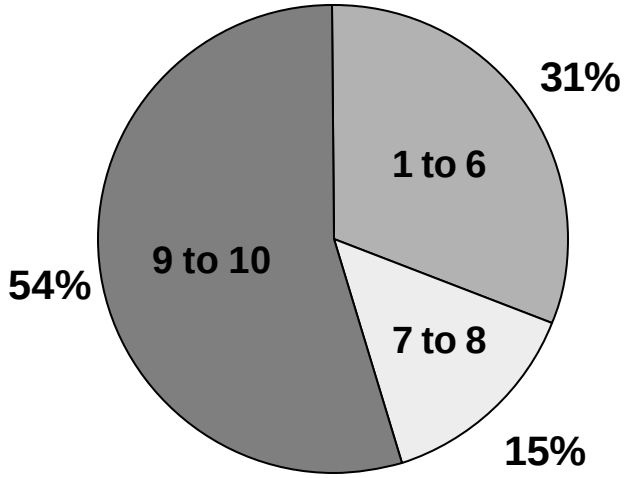
# Programmable thermostats were chosen most by residential participants to automatically adjust electricity use; it is notable that one-third did not know what device had been installed or indicated that none was installed

## CPP-V Program: Automated Control Device




## Level of Satisfaction

(Scale: 1= Very Dissatisfied to 10 = Very Satisfied)




While a majority of control device users were highly satisfied with its ability to regulate electricity use during peak periods, one-third gave scores suggesting that the device was not meeting their needs (scores 1-6).

Q77: Which of the following automated control devices was installed at your house as part of the smart shift & save pricing program? (If knew device) Q78: How satisfied are you with how this device has automatically adjusted your electricity usage during super/critical peak periods?